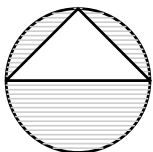


IDEA PUBLIC SCHOOLS

IDEA DONNA MECHANICAL UPGRADES DONNA, TEXAS

VICINITY MAP



IDEA DONNA
401 S 1ST ST,
DONNA, TX
78537

SCOPE OF WORK:

- SCOPE OF WORK: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH COMPLETE OPERATIONAL SYSTEMS. MAJOR ITEMS OF WORK INCLUDE, BUT ARE NOT LIMITED TO:
1. FLAGSHIP BUILDING:
 - a. REPLACE DX RTUS AND ROOF CURBS WITH NEW UNITS ON NEW ROOF CURBS (QTY. 5).
 - b. RETAIN AND REUSE EXISTING VAV BOXES (QTY. 30). TAB AND MECHANICAL CONTRACTORS SHALL INSPECT BOXES TO REMAIN, TO VERIFY DAMPERS, ACTUATORS, FLOW SENSOR RINGS, AND PROVIDE A LIST OF DEFICIENCIES. OWNER WILL USE ALLOWANCES TO CORRECT SUCH DEFICIENCIES.
 - c. REPLACE VAV BOXES, AND PROVIDE NEW VAV BOXES AS NOTED.
 - d. RETAIN ALL OTHER HVAC EQUIPMENT INCLUDING EXHAUST FANS, KITCHEN FANS, MINI-SPLITS, AND ELECTRIC UNIT HEATERS.
 - e. FOR ALL HVAC EQUIPMENT (EXISTING AND NEW), REPLACE EXISTING CONTROLS.
 2. 11TH AND 12TH GRADE BUILDING:
 - a. REPLACE DX SPLIT SYSTEM UNITS AND RELATED BYPASS DAMPERS (QTY. 2).
 - b. REPLACE EXISTING VAV BOXES (QTY. 11).
 - c. RETAIN ALL OTHER HVAC EQUIPMENT INCLUDING EXHAUST FANS WITH VFDS, AND MINI-SPLITS.
 - d. FOR ALL HVAC EQUIPMENT (EXISTING AND NEW), PROVIDE CONTROLS UPGRADES.
 3. FOR THE DEMOLISHED EQUIPMENT, REMOVE REFRIGERANT AND DELIVER TO OWNER. PRIOR TO DEMOLISHING REFRIGERANT PIPING, PROVIDE NEW REFRIGERANT PIPING, RELATED SPECIALTIES, PIPE INSULATION, JACKETING, PIPE SUPPORTS, AND MISCELLANEOUS ACCESSORIES.
 4. REMOVE MISCELLANEOUS DUCTWORK, REFRIGERANT AND CONDENSATE PIPING, SUPPORTS, INSULATION, CONTROLS EQUIPMENT AND MATERIALS, ETC. THAT WILL NO LONGER BE USED. CLEAR SPACE FOR NEW WORK.
 5. PROVIDE DUCTWORK, REFRIGERANT PIPING, INSULATION, CONTROL DAMPERS, AND OTHER ACCESSORIES FOR A COMPLETE AND OPERATIONAL SYSTEM.
 6. BUILDING AUTOMATION SYSTEM (BAS): PROVIDE NEW ALC CONTROLS FOR ALL EXISTING AND NEW EQUIPMENT, INCLUDING CONTROLLERS, SENSORS, RELAYS, GRAPHICS, SEQUENCES, ETC. COORDINATE BACNET POINTS FOR NEW EQUIPMENT. COMMISSION CONTROLS SEQUENCES.
 - a. CONTROLLERS FOR AHUS AND VAV BOXES AT THE 11TH AND 12TH GRADE BUILDING WERE REPLACED ABOUT A YEAR AGO. RETAIN AND REUSE NEWLY REPLACED CONTROLLERS TO EXTENT POSSIBLE.
 7. TESTING, ADJUSTING, & BALANCING (TAB)
 8. SHOP DRAWING SUBMITTALS FOR ALL MECHANICAL SYSTEMS INCLUDING BUT NOT LIMITED TO EQUIPMENT, DUCTWORK AND PIPING. THESE INCLUDE COORDINATION DRAWINGS FOR PLACING OF MECHANICAL SYSTEMS IN RELATION TO WORK BY OTHER DISCIPLINES.
 9. PROVIDE WINDSTORM RESTRAINTS FOR EXTERIOR MOUNTED EQUIPMENT, ALONG WITH SEALED DRAWINGS AND CALCULATIONS SHOWING THAT RESTRAINTS MEET IBC REQUIREMENTS.
 10. COORDINATE ELECTRICAL WORK WITH DIV. 26 AS REQUIRED.
 11. COORDINATE FIRE ALARM RELATED WORK WITH FIRE ALARM CONTRACTOR. AUTHORITY HAVING JURISDICTION TO TEST, APPROVE, AND SUBMIT REPORT TO ENGINEER. PROVIDE SMOKE DETECTORS, WIRING AND CONTROLS FOR UNITS, 2000 CFM AND LARGER, WHERE NONE EXIST.
 12. PAINTING: SEE DIVISION 9 SPECIFICATIONS. PAINT ALL EXPOSED PIPING, DUCTWORK, INSULATION, HANGERS, ACCESSORIES IN INTERIOR EXPOSED AREAS. PAINT EXTERIOR PIPE SUPPORTS. COORDINATE PAINT TYPE, COLOR AND SCOPE OF WORK WITH ARCHITECT.
 13. COMMISSIONING: PROVIDE ASSISTANCE WITH COMMISSIONING SERVICES PER SPECIFICATIONS. THIS INCLUDES COMPLETING SYSTEMS READINESS CHECKLISTS, PERFORMING FUNCTIONAL TESTING, PROVIDING OPERATOR TRAINING, ETC.

DATE OF ISSUE

SEPTEMBER 30, 2026

LIST OF DRAWINGS

COVER	COVER SHEET
ME1.01	GENERAL NOTES, SYMBOLS & LEGEND
ME2.01	MECHANICAL & ELECTRICAL DEMOLITION PLANS – FLAGSHIP BUILDING
ME2.02	MECHANICAL & ELECTRICAL DEMOLITION PLANS – 11-12TH BUILDING
ME3.01	MECHANICAL & ELECTRICAL RENOVATION PLANS – FLAGSHIP BUILDING
ME3.02	ROOF PATCH & REPAIR RENOVATION PLANS – FLAGSHIP BUILDING
ME3.03	MECHANICAL & ELECTRICAL RENOVATION PLANS – 11-12TH BUILDING
ME4.01	MECHANICAL SCHEDULES
ME4.02	ELECTRICAL SCHEDULES
ME5.01	MECHANICAL DETAILS
ME5.02	ELECTRICAL DETAILS

EXECUTIVE COMMITTEE

COLLIN SEWELL	CHAIR
ED RIVERA	VICE-CHAIR & SECRETARY
ERICH HOLMSTEN	TREASURER

BOARD OF DIRECTORS

NAJ ATKINSON	MEMBER
THERESA BARRERA-SHAW	MEMBER
NANETTE COCERO	MEMBER
DAVID DUNN	MEMBER
STACY ENG	MEMBER
RYAN GREEN	MEMBER
GARY LINDGREN	MEMBER
LILYA MATOS	MEMBER
CONNIE MINER	MEMBER

RIO GRANDE VALLEY REGIONAL BOARD

MARIA ANTONIA CHAPA	MARISSA EMMA FALCON
CERISE R. DE GARDUNO	ZULIEDA LOPEZ-HABBOUCHE
ALYSSA L. ROMERO, BOARD CHAIR	CJ SANCHEZ
DR. MARCOS SILVA	JESUS (JESSE) ZEPEDA

CODES & ORDINANCES:

1. GENERAL:
- UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS, PERFORM ALL WORK PER APPLICABLE VERSION OF INTERNATIONAL BUILDING CODES, LOCAL CODES, AND ORDINANCES.

PRIOR TO SUBMITTING PROPOSAL, NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
2. WIND STORM CERTIFICATION:
- CONTRACTOR SHALL DESIGN, CONSTRUCT, AND INSTALL EXTERIOR AND ROOF MOUNTED EQUIPMENT TO MEET GOVERNING BUILDING CODES.
3. PERMITS:
- CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.

CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
4. APPROVALS AND INSPECTIONS:
- OBTAIN APPROVAL FROM CITY FIRE DEPARTMENT AND BUILDING AND SAFETY DEPARTMENT PRIOR TO INSTALLATION OF ANY FIRE RELATED ITEMS.

COORDINATE PRESSURE TESTS, INSPECTIONS AND APPROVAL FOR ALL SYSTEMS WITH PERMITTING OFFICER, OWNER AND ENGINEER.

PIPING:

- DRAWINGS ARE DIAGRAMMATIC IN NATURE. FOR CLARITY SAKE, MOST PIPING OFFSETS/RISES/DROPS ARE NOT SHOWN IN DRAWINGS.
- COORDINATE LOCATION OF MECHANICAL SYSTEMS WITH PLUMBING, ELECTRICAL, AND OTHER TRADES.
- SEAL ALL PENETRATIONS IN FIRE RATED WALLS WITH APPROVED FIRE RATED SEALANT. SEE SPECIFICATIONS. SEE ARCHITECTURAL DRAWINGS FOR FIRE WALL LOCATIONS.
- ROUTE INSULATED PIPING TIGHT AGAINST CEILING STRUCTURE AND WRAP PIPING BELOW BEAMS. CONCEAL PIPING ABOVE SUSPENDED CEILING TO EXTENT POSSIBLE. DO NOT ROUTE ANY PIPING ABOVE ELECTRICAL AND TELECOMMUNICATION ROOMS. COORDINATE LAYOUT WITH OTHER TRADES SUCH AS DUCTWORK, PLUMBING, LIGHTING, ELECTRICAL, FIRE PROTECTION, ETC. PROVIDE SHOP DRAWINGS TO CLEARLY SHOW PIPING ROUTING AND COORDINATION WITH OTHER ELEMENTS. IN CASE OF CONFLICT, COORDINATE REROUTING OF UTILITIES WITH ENGINEER.
- INSTALL ALL PIPING PENETRATING WALLS, PERPENDICULAR TO WALL. DRAWINGS INDICATE GENERAL ROUTING ONLY.
- SLEEVE ALL EXTERIOR WALL AND GRADE BEAM PENETRATIONS. GRADE BEAM PENETRATIONS SHALL BE MADE WITHIN MIDDLE 1/3 OF VERTICAL SPAN OF BEAM.

MECHANICAL SYMBOLS LEGEND

	DUCT SIZE: FIRST FIGURE IS SIDE SHOWN		THERMOSTAT
	BELOW DUCT SIZE: FIRST FIGURE IS SIDE SHOWN		SPACE HUMIDITY SENSOR
	DIRECTION OF FLOW--RETURN		DUCT HUMIDITY SENSOR
	DIRECTION OF FLOW--SUPPLY		SPACE CARBON DIOXIDE SENSOR
	FIRE DAMPER		STATIC PRESSURE SENSOR
	FLEXIBLE DUCT		DUCT CARBON DIOXIDE SENSOR
	EXHAUST AIR GRILLE		CHILLED WATER RETURN
	RETURN AIR/TRANSFER AIR GRILLE		CHILLED WATER SUPPLY
	SUPPLY AIR DIFFUSER		CONDENSATE PIPING
	SIDE TAP WITH DAMPER		BUTTERFLY VALVE
	BACKDRAFT DAMPER		MANUAL VALVE
	AUTO--FLOW REGULATOR		AUTOMATIC VALVE
	DRAIN VALVE		CHECK VALVE
	BALL VALVE		PRESSURE GAUGE & COCK
			TEMPERATURE SENSOR
			THERMOMETER WELL

ABBREVIATIONS

A	AMPS	DMPR.	DAMPER	MZ	MULTI--ZONE
ACCU	AIR COOLED CONDENSING UNIT	DISC.	DISCONNECT	NC	NORMALLY CLOSED
ACT	ACTUATOR	EMS	ENERGY MANAGEMENT SYSTEM	NO	NORMALLY OPEN
AFF	ABOVE FINISHED FLOOR			NTS	NOT TO SCALE
AHU	AIR HANDLING UNIT	EAG/EG	EXHAUST AIR GRILLE	OA	OUTSIDE AIR
B.	BOTTOM	ENT.	ENTERING	PH	PHASE
BAS	BUILDING AUTOMATION SYSTEM	EXT.	EXTERNAL OR EXTERIOR	RA	RETURN AIR
BOP	BOTTOM OF PIPE	FCU	FAN COIL UNIT	RAG/RG	RETURN AIR GRILLE
BOTT.	BOTTOM	FD	FIRE DAMPER	RD	ROOF DRAIN
C.	CONDUIT OR COMMON	FM	FLOW METER	RM.	ROOM
CHR	CHILLED WATER RETURN	FS	FLOW SWITCH	RPZ	REDUCED PRESSURE ZONE
CHS	CHILLED WATER SUPPLY	FPI	FINS PER INCH	SA	SUPPLY AIR
CHW	CHILLED WATER	G.	GROUND	SD	SUPPLY AIR DIFFUSER
CHWP	CHILLED WATER PUMP	GA.	GAGE	SS	STAINLESS STEEL
CR	CONDENSER WATER RETURN	GALV.	GALVANIZED	SZ	SINGLE ZONE
CS	CONDENSER WATER SUPPLY	GPM	GALLONS PER MINUTE	TAB	TESTING & BALANCING
CLG.	CEILING OR COOLING	GRND.	GROUND	T.O.L.	TOP OF LOUVER
COMB.	COMBINATION	HB	HOSE BIBB	TS	TEMPERATURE SENSOR
CONC.	CONCRETE	HP	HORSEPOWER	TSTAT	THERMOSTAT
COND.	CONDUIT	HS	HUMIDITY SENSOR	UG	UNDERGROUND
CT	COOLING TOWER	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	UNO	UNLESS OTHERWISE NOTED
CU.	COPPER			V	VOLTS
CW	CITY WATER	LVG.	LEAVING	VAV	VARIABLE AIR VOLUME
DDC	DIRECT DIGITAL CONTROLS	MECH	MECHANICAL	VFD	VARIABLE FREQUENCY DRIVE
DOP	DIRECT DRIVE PLENUM	MS	MOTOR STARTER	W	WIRE

COORDINATION:

1. GENERAL:
- CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND MECHANICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.

TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.

PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.
2. SITE:
- TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.
3. ARCHITECTURAL AND STRUCTURAL:
- REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS OF CONSTRUCTION, INCLUDING BEAMS, FLOOR AND WALL PENETRATIONS, CHASES, AND REFLECTED CEILING PLANS. VERIFY OPENING SIZES WITH EQUIPMENT FURNISHED.

SLEEVE ALL EXTERIOR WALL AND GRADE BEAM PENETRATIONS. GRADE BEAM PENETRATIONS SHALL BE MADE WITHIN MIDDLE 1/3 OF VERTICAL SPAN OF BEAM.

SEAL AROUND DUCTS AND PIPING AT ALL WALLS, A/C ROOMS, AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
4. SPATIAL COORDINATION:
- COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB--CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.

SPACES ABOVE CEILING ARE CONGESTED. DESIGN INTENT IS THAT UTILITIES BE INSTALLED TIGHT AGAINST CEILING STRUCTURE TO EXTENT POSSIBLE, WHILE RETAINING ADEQUATE MAINTENANCE ACCESS PER CODES.

IN CASE OF CONFLICTS, ITEMS SHALL BE ARRANGED ACCORDING TO THE FOLLOWING PRIORITIES: LIGHTING, FIRE PROTECTION, HVAC. PROVIDE OFFSETS/RISES/DROPS REQUIRED TO RESOLVE CONFLICTS WITH OTHER UTILITIES, AND TO ACCOMMODATE ALL UTILITIES ABOVE CEILINGS.

IN GENERAL, REROUTE SMALLER DUCTS/PIPES THROUGH JOISTS TO RESOLVE CONFLICTS WITH LARGER. PERFORM REROUTING IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.

PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.

IN GENERAL ROUTE DUCTS/PIPES IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.

SEE ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL PANELS TO AVOID DUCTWORK AND PIPING RUNNING OVER THESE AREAS. COORDINATE WITH ELECTRICAL CONTRACTOR.

LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH OTHER TRADES TO AVOID CONFLICT AND ADJUST LOCATION IF NEEDED WITHOUT COMPROMISING AIR DEVICES PERFORMANCE.
5. CONTROLS:
- REFER TO SPECIFICATIONS FOR CONTROL COMPONENTS AND DEVICES TO BE COORDINATED WITH MECHANICAL WORK.

CONTROLS CONTRACTOR SHALL PROVIDE BUILDING AUTOMATION SYSTEM (BAS) THAT CONTROLS EQUIPMENT SHOWN ON DRAWINGS. CONTROLS CONTRACTOR IS RESPONSIBLE FOR INSTALLING LOW VOLTAGE POWER AND COMMUNICATIONS. REFERENCE SPECIFICATIONS FOR CONTROL COMPONENTS AND SEQUENCING TO BE COORDINATED W/ MECH. WORK.

DRAWINGS SHOW GENERAL LOCATION OF DDC SENSORS (T, RH, AND CO2). UNLESS NOTED OTHERWISE, INSTALL SENSORS AT 48" ABOVE FINISHED FLOOR. WIRING SHALL BE IN CONCEALED WALLS. IN CASE OF CONFLICTS WITH FURNITURE, WINDOWS, ETC., COORDINATE EXACT LOCATION WITH ENGINEER.

GENERAL NOTES:

1. CONTRACT RELATED:
- COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.

WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
2. TEST & BALANCE:
- CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED, CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.

TEST & BALANCE SHALL BE PERFORMED UNDER GENERAL CONTRACTOR, SEPARATE FROM MECHANICAL CONTRACT. DURING BIDDING, CONTRACTOR SHALL SUBMIT A COPY OF EVIDENCE THAT TAB AGENT MEETS THE QUALIFICATIONS SPECIFIED UNDER DIV. 23 SECTION 230593 TO PRIME CONTRACTOR.

TEST & BALANCE TO COORDINATE MINIMUM AND MAXIMUM OUTSIDE AIR DAMPER SETTINGS WITH DDC CONTROLS AND ENGINEER. PROVIDE TIME ALLOWMENT FOR MULTIPLE DAMPER SETTINGS IN SOME CASES.
3. CONTRACTOR SHALL COORDINATE TAB ACTIVITIES WITH TAB CONTRACTOR.

CONTROLS:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL HARDWARE, SOFTWARE, CONTROL AND MONITORING DEVICES, AUXILIARY DEVICES, CABLES AND WIRE, PROGRAMMING AND INSTALLATION SERVICES TO RESULT IN A FULLY FUNCTIONAL SYSTEM WHICH PERFORMS IN MANNER EXPECTED BY OWNER AND ENGINEER.
2. COOPERATE AND COORDINATE FULLY WITH PROVIDER AND INSTALLER OF NEW HVAC UNITS TO ENSURE COMPLETE AND EFFECTIVE CONTROL OF UNITS IS ACHIEVED.
3. CONTRACTOR SHALL COOPERATE AND COORDINATE WORK ACTIVITIES EQUIPMENT SUPPLIER TO ENSURE SMOOTH TROUBLE--FREE INSTALLATION.
4. WHERE NOT SPECIFICALLY INDICATED ON PLANS, CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL RELAYS AND CONTACTORS, POWER TO PANELS, AND OTHER CONTROL ELEMENTS. ALTHOUGH CONTRACTOR MAY COORDINATE WITH OTHER TRADES TO PROVIDE MISCELLANEOUS ELECTRICAL WORK, THE FINAL RESPONSIBILITY FOR ACHIEVEMENT OF CONTROL SEQUENCES LIES WITH CONTRACTOR.
5. REFER TO OPERATING SEQUENCE IN SPECIFICATIONS FOR ALARMS AND SEQUENCES REQUIRED.
6. ALL REFERENCES TO CONTROLLED / MONITORED POINTS AND / OR GRAPHICS WHICH ARE ON A CURRENT CONTROL SYSTEM, AND WHICH WILL BE REMOVED DURING COURSE OF CONSTRUCTION OF THIS PROJECT, MUST BE COMPLETELY REMOVED FROM CONTROL SYSTEM SOFTWARE, CONTROL SYSTEM WIRING AND CONTROLLERS TO SUCH POINTS MUST BE REMOVED AS WELL.
7. RECOMMENDED DIVISION OF RESPONSIBILITIES BETWEEN SUB--CONTRACTORS IS AS FOLLOWS:
- WITH OWNER COORDINATE ETHERNET CONNECTION AND EXTEND IT FROM OWNER DESIGNATED LOCATION TO NEW DDC PANELS AS APPLICABLE.

CONTRACTOR SHALL COORDINATE CONTROL WIRING BETWEEN CONTROL PANELS AND UNITARY CONTROLLERS. PROVIDE MEANS TO SUPPORT WIRING (J--HOOKS). DO NOT SUPPORT WIRING FROM EXISTING DATA OR FIRE ALARM WIRING SUPPORTS.

WITH ELECTRICAL SUB CONTRACTOR, CONTRACTOR COORDINATES 120V POWER WIRING AND CONDUIT TO NEW CONTROLLERS (AND CIRCUIT BREAKERS, IF NO SPARES EXIST).
8. CONTRACTOR IS RESPONSIBLE FOR:
- VALVES AND ACTUATORS

GATEWAY INTERFACES AND ALL RELATED ACCESSORIES FOR FULL COMMUNICATION

SOFTWARE, PROGRAMMING

ALL NETWORK CONTROL PANELS, CONTROLLERS, SOFTWARE AND PROGRAMMING.

WIRING CONDUIT FOR CONTROL AND MONITORING DEVICES

CONTROL RELAYS

SHOP DRAWINGS PER SPECIFICATIONS.

INSULATION:

- FIBERGLASS INSULATION MAY NOT BE USED ON ANY COLD SURFACES; ONLY CLOSED CELL INSULATION IS ACCEPTABLE.
- PROVIDE INSULATION ON ALL SURFACES CAPABLE OF CREATING CONDENSATION.

DUCTWORK:

1. DUCTWORK GENERAL:
- DRAWINGS ARE DIAGRAMMATIC IN NATURE. FOR CLARITY SAKE, MOST DUCT OFFSETS/RISES/DROPS ARE NOT SHOWN. WHERE DUCTS PENETRATE WALLS, INSTALL THEM PERPENDICULAR TO WALL.

RECTANGULAR AND ROUND DUCTWORK SHALL BE GALVANIZED STEEL. SIZES SHOWN ARE INSIDE CLEAR DIMENSION, UNLESS NOTED OTHERWISE.

VERIFY BOTTOM OF DUCT ELEVATION AND COORDINATE WITH OTHER TRADES.

CONSTRUCT AND LEAKAGE TEST ALL DUCTWORK BASED ON SPECIFICATIONS AND SMACNA REQUIREMENTS, WHICHEVER IS MORE STRINGENT. COORDINATE PRESSURE CLASSES WITH EQUIPMENT SCHEDULES.

FLEXIBLE DUCTS MAXIMUM LENGTH SHALL NOT EXCEED 6 FEET. USE OF FLEXIBLE DUCTWORK IS LIMITED TO AREAS WITH AN ACCESSIBLE SUSPENDED CEILING. PINCHED DUCT WILL HAVE TO BE REPLACED.

IN AREAS WHERE DUCT CONFLICTS CANNOT BE AVOIDED, ROUTE SMALLER DUCTS THROUGH ROOF JOISTS.

LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH ELECTRICAL, IF NEEDED. RELOCATE DIFFUSER TO ADJACENT TILE.
2. DUCTWORK INSULATION:
- WRAP ALL OUTSIDE AIR, SUPPLY, AND RETURN DUCTWORK UNLESS NOTED OTHERWISE.

IN ADDITION, FOR ACOUSTICAL PERFORMANCE INTERNALLY LINE FIRST 10' OF SUPPLY AND LAST 10' OF RETURN DUCTWORK.

PROVIDE ACOUSTICAL LINING FOR ALL TRANSFER DUCTS AND RETURN AIR ELBOWS.
3. DUCT FITTINGS:
- WHERE RECTANGULAR TEE FITTINGS ARE SHOWN, PROVIDE FITTING WITH ADJUSTABLE DIVIDER SHEET AND TURNING VANES.

WHERE RECTANGULAR MAIN AND BRANCH CONNECTIONS ARE SHOWN, PROVIDE EXTRACTOR VANES. NOT APPLICABLE TO DUCTWORK DOWNSTREAM OF VAV BOXES.

PROVIDE TURNING VANES IN ALL ELBOWS PER SPECS.
4. DAMPERS:
- IN AN ACCESSIBLE LOCATION, PROVIDE MANUAL--TYPE VOLUME BALANCING DUCT DAMPERS IN ALL SUPPLY, RETURN, AND EXHAUST DUCT BRANCHES TO INDIVIDUAL GRILLES, REGISTERS, AND DIFFUSERS (GRD). TO MINIMIZE NOISE INSTALL DAMPERS CLOSER TO THE BRANCH CONNECTION THAN TO THE GRD. IN DUCTWORK, PROVIDE ACCESS DOORS TO ALL DAMPERS.

ABOVE INACCESSIBLE CEILINGS AND IN CASE DUCT CONFIGURATION DOES NOT ALLOW FOR INSTALLATION OF DAMPER IN DUCTWORK, PROVIDE REMOTE MANUAL DAMPER BY YOUNG REGULATOR OR EQUAL, (CABLE OPERATED SYSTEM) WITH ENGINEER'S PERMISSION CONTRACTOR MAY PROVIDE VOLUME DAMPER THAT IS INTEGRAL TO GRD.

PROVIDE DYNAMIC FIRE DAMPERS (RUSKIN DDB20, TYPE B OR EQUAL) IN ACCORDANCE WITH CODE REQUIREMENT, IN ALL PENETRATIONS OF FIRE RATED WALLS, OCCUPANCY SEPARATION WALLS, BARRIERS AND PARTITIONS, AND EXIT CORRIDORS. REFER TO ARCHITECTURAL PLANS FOR RATED WALLS. PROVIDE ACCESS DOORS AS PER CODE REQUIREMENTS. EQUAL TO RUSKIN ADH--22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. WHERE GRILLE ACCESS IS INDICATED, ADDITIONAL DUCT ACCESS DOOR IS NOT REQUIRED. WHERE THE CEILING IS FIRE RATED PROVIDE FIRE RATED AIR DEVICES FOR TRANSFER & RETURN AIR GRILLES AND SUPPLY AIR DIFFUSERS AS PER CODE REQUIREMENTS. REFER TO ARCHITECTURAL PLANS FOR RATED CEILINGS.

PROVIDE ACCESS DOORS (NOT SHOWN IN DRAWINGS) FOR INSPECTION OF DUCT MOUNTED EQUIPMENT SUCH AS FIRE/SMOKE DAMPERS, MANUAL BALANCING DAMPERS AND TURNING VANES. IN AREAS WITH HARD CEILING COORDINATE ACCESS DOOR LOCATIONS AND CEILING ACCESS PANELS WITH OTHER TRADES.
- EXISTING CONDITIONS COORDINATION/RENO.:
1. COORDINATE SUMMER SCHOOL SCHEDULES AND PROJECT COMPLETION DATES WITH OWNER. PERFORM WORK IN CLOSE COORDINATION WITH OWNER. MAJORITY OF WORK SHALL BE PERFORMED WHEN SCHOOLS ARE UNOCCUPIED, SUCH AS WEEKENDS, AFTER HOURS, SPRING AND SUMMER BREAK OR AT OWNER APPROVED TIME.

2. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.

3. PROVIDE LIGHTED SAFETY BARRIERS AROUND WORK AREAS AT ALL TIMES.

4. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE WORK AND THE RESPONSIBILITY OF THE CONTRACTOR ONCE THE ALLOWANCE IS APPROVED.

5. COORDINATE WITH OWNER AND ENGINEER FOR ANY DISRUPTION IN UTILITY SERVICES, PARTICULARLY THOSE THAT MIGHT AFFECT OTHER BUILDINGS ON CAMPUS.

6. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.

7. OWNER'S EQUIPMENT, MATERIALS, FURNISHINGS, CARPETS, AND INTERIOR SURFACES ARE TO BE PROTECTED FROM DUST ACCUMULATION AND DAMAGE, AND MUST BE THOROUGHLY CLEANED PRIOR TO SUBSTANTIAL COMPLETION. CARPETS ARE TO BE PROTECTED WITH HEAVY DUTY PLASTIC SHEETING. REFER TO SPECIFICATIONS SECTION 01700 EXECUTION REQUIREMENTS FOR FURTHER DETAIL.

8. MAINTAIN PROJECT SITE FREE OF WASTE MATERIALS AND DEBRIS, AND CLEAN SITE AT END OF EACH WORK DAY TO GREATEST EXTENT POSSIBLE.

9. SUBMISSION OF PROPOSAL IS CONSIDERED AN ACKNOWLEDGEMENT THAT CONTRACTOR VISITED SITE, VERIFIED ALL EXISTING CONDITIONS, AND INCLUDING ANY MODIFICATIONS TO EXISTING AND NEW WORK REQUIRED FOR INSTALLATION OF A COMPLETE AND OPERATIONAL SYSTEM.

10. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE CONDITIONS THAT COULD HAVE BEEN VERIFIED PRIOR TO SUBMITTING PROPOSAL.

11. DRAWINGS SHOWING ALL EQUIPMENT LOCATIONS, DUCT AND PIPE SIZES, ELEVATIONS, AND ELECTRICAL INFORMATION HAVE BEEN RECREATED USING DRAWINGS AND SITE SURVEYS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SITE CONDITIONS IN ORDER TO MAKE ANY NECESSARY ADJUSTMENTS, PRIOR TO ORDERING MATERIALS OR COMMENCING INSTALLATION. CHANGE ORDERS WILL NOT BE APPROVED FOR DIMENSIONAL VERIFICATIONS REQUIRING MINOR ADJUSTMENTS NEEDED TO COMPLETE INSTALLATION.

12. PROVIDE SHOP DRAWINGS TO COORDINATE EXISTING AND NEW WORK.

13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND DISPOSE OF ALL ITEMS INDICATED TO BE REMOVED. ONLY EXPRESSLY DESIGNATED ITEMS SHALL BE TURNED OVER TO OWNER.

14. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL MATERIAL REMOVED. CONTRACTOR SHALL DISPOSE OF ALL MATERIALS WHICH THE OWNER DOES NOT WANT.

15. REMOVE ALL EQUIPMENT, MATERIALS, CONTROL DEVICES, BOXES, POWER AND CONTROL WIRING, SAFETY SWITCHES, TUBING, ELECTRICAL CONDUIT, PIPING, SENSORS, ELECTRICAL DISCONNECTS, SUPPORTING DEVICES AND STRUCTURES, AND ALL RELATED AUXILIARY ITEMS ASSOCIATED WITH EQUIPMENT AND MATERIALS WHICH WILL NO LONGER BE USED AFTER THE PROJECT IS COMPLETE.

16. CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DISTURBED SURFACE TO ITS ORIGINAL CONDITION. ANY ROAD, TRAFFIC, OR OTHER PAINTED OR ERECTED SIGNS DAMAGED AS A RESULT OF WORK PERFORMED IN THOSE AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.

17. CUTTING AND PATCHING OF WALLS DAMAGED IN THE REMOVAL OF ITEMS SHALL BE DONE, WHETHER OR NOT DRAWINGS SPECIFICALLY CALL FOR SUCH REPAIRS.

18. ABOVE CEILING WORK: FIELD VERIFY LOCATIONS OF EXITING LIGHTING FIXTURES, SPEAKERS, HORN STROBES, SMOKE DETECTORS ETC. THAT WILL BE RETAINED. ENSURE THAT THESE ARE IN WORKING CONDITION PRIOR TO DEMOLITION. IF ANY OF THE ABOVE ITEMS ARE IN NON--WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ENGINEER.

19. PRIOR TO DEMOLITION WORK, SUBMIT A DETAILED DEMOLITION AND CONSTRUCTION SCHEDULE TO OWNER AND ENGINEER. DO NOT PROCEED WITH WORK UNTIL PROPOSED SCHEDULE IS APPROVED BY ALL PARTIES. PROVIDE OWNER WITH MINIMUM 10 DAYS ADVANCE NOTICE OF INTENT TO PERFORM ANY WORK WHICH WILL REQUIRE CHILLER, BOILER PLANT OR ELECTRICAL SERVICE TO BE SHUT DOWN.

20. PROVIDE DUCTWORK MODIFICATION AND TRANSITION PIECES PER SMACNA RECOMMENDATION, AND AS REQUIRED TO ACCOMMODATE NEW UNITS. IF APPLICABLE, SEAL DUCT--LINER ON EXISTING DUCTWORK SUCH THAT LOOSE INSULATION IS NOT IN THE AIR STREAM. EXTEND EXTERNAL INSULATION ON NEW DUCT 12" PAST THE CONNECTION POINT OF NEW AND OLD DUCTWORK.
- EQUIPMENT:
1. EQUIPMENT INSPECTION:

FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.

ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY EQUIPMENT CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.

EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.

2. EQUIPMENT INSTALLATION:

AFFIX ID TAGS TO ALL MECHANICAL EQUIPMENT PER SPECIFICATIONS.

3. EQUIPMENT INSULATION:

INSULATE ALL SURFACES THAT ARE CAPABLE OF BECOMING COLD AND COLLECTING CONDENSATE. THIS INCLUDES SUPPLY DIFFUSERS AND CONNECTING DUCTWORK / TRANSITION PIECES.

4. MECHANICAL:

MECHANICAL CONTRACTOR IS TO COORDINATE WITH TESTING, ADJUSTING, AND BALANCING (TAB) FIRM TO PROVIDE REPLACEMENT SHEAVES / PULLEYS FOR MOTORS IF / AS REQUIRED BY TAB TO ACHIEVE SPECIFIED FLOW RATES FOR EQUIPMENT.

5. ELECTRICAL:

CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ELECTRICAL CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.

DUE TO VARIATIONS IN EQUIPMENT CHARACTERISTICS BY DIFFERENT EQUIPMENT SUPPLIERS, MECHANICAL EQUIPMENT ULTIMATELY PROVIDED MAY DIFFER IN HORSEPOWER OR AMPERAGE REQUIREMENTS FROM THAT SPECIFIED IN THESE DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR PRIOR TO BIDDING, AND PRIOR TO SUBMITTALS AND ORDERING EQUIPMENT, TO ENSURE THAT EQUIPMENT ELECTRICAL REQUIREMENTS ARE CONVEYED TO ELECTRICAL CONTRACTOR. IT IS SOLELY CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPATIBILITY ISSUES ARE COORDINATED.

6. PLUMBING:

COORDINATE LOCATIONS WITH PLUMBING CONTRACTOR.

PROVIDE INSULATED AND TRAPPED CONDENSATE DRAIN LINES FROM ALL AIR CONDITIONING EQUIPMENT AND TERMINATE TO NEAREST CONDENSATE DRAIN RECEPTORS OR OTHER APPROVED RECEPTACLES. COORDINATE WITH PLUMBING.
- ELECTRICAL:
1. ALL ELECTRICAL WORK SHALL BE UNDER THE MASTER ELECTRICIAN WHO PULLED THE PERMIT AND ITS JOURNEYMAN ELECTRICIANS.

2. PERFORM ALL WORK PER ADOPTED N.E.C. AND APPLICABLE STATE STANDARDS, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.

3. UNLESS NOTED OTHERWISE, MINIMUM POWER CIRCUIT IS TO BE #12 THHN/THWN--2 WITH #12 GROUND IN 3/4" CONDUIT, WITH THE EXCEPTION THAT ANY CIRCUIT LONGER THAN 100 FEET SHALL BE MINIMUM #10 AWG WITH #10 GROUND WIRE. CIRCUIT LONGER THAN 200 FEET SHALL BE MINIMUM #8 AWG WITH #10 GROUND WIRE MINIMUM.

4. ALL EXISTING ID NAMETAGS AND CIRCUIT IDENTIFICATION MUST BE REVISED TO REFLECT CURRENT CONDITIONS FOR ALL EQUIPMENT WHICH IS NEW, REPLACED, OR DEMOLISHED. REMOVE ID NAMETAGS FOR DEMOLISHED EQUIPMENT. REPLACE EXISTING NAMETAGS WITH NEW FOR REPLACED EQUIPMENT. IF REPLACEMENT EQUIPMENT HAS DIFFERENT NAME, PROVIDE NEW NAMETAGS FOR ALL NEW EQUIPMENT. ALL CIRCUIT BREAKER DIRECTORIES FOR PANELS IN WHICH NEW WORK TAKES PLACE ARE TO BE REPLACED WITH NEW DIRECTORIES WHICH LIST EXISTING CIRCUITS AND NEW. ALL UNUSED CIRCUITS ARE TO BE MARKED AS 'SPARE' IN THE DIRECTORIES. DIRECTORIES ARE TO BE COMPUTER GENERATED; NO HAND WRITTEN DIRECTORIES ARE ACCEPTABLE.

5. HAND--WRITTEN CIRCUIT BREAKER DIRECTORIES WILL NOT BE ACCEPTED. DIRECTORIES MUST BE COMPUTER GENERATED AND PRINTED TO REFLECT FINAL INSTALLED CONDITIONS.

6. MARK ALL J--BOXES WITH INDELEIBLE INK, INDICATING POWER CIRCUITRY INFORMATION. LABEL ALL EQUIPMENT ITEMS PER SPECIFICATIONS.

7. ALL EXTERIOR RACEWAYS ABOVE GROUND SHALL BE RIGID GALVANIZED.

8. UNDER NO CIRCUMSTANCES SHALL MORE THAN THREE CIRCUITS SHARE THE SAME NEUTRAL, AND SUCH CIRCUITS MUST BE SEPARATE PHASE.

9. SINCE ELECTRICAL CHARACTERISTIC OF EQUIPMENT (SUCH AS HORSEPOWER, KW, AMPERAGE, VOLTAGE, ETC.) SUBMITTED MAY DIFFER FROM THOSE SPECIFIED IN DRAWINGS, CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND OTHER CONTRACTORS TO ENSURE COMPATIBILITY BETWEEN ELECTRICAL AND MECHANICAL EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.

10. USE LONG--SWEEPS FOR ALL CHANGES IN DIRECTION ON CONDUIT RUNS.

11. ALL INTERIOR RACEWAYS SHALL BE EMT.

12. FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.

13. PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER DRAWINGS AND SPECIFICATIONS.

14. ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.

15. ELECTRICAL WIRING SHALL NOT BE SPICED BELOW GRADE.

16. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.

17. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.

18. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.

19. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB--CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.

20. SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.

21. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.

22. MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.

23. AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.

24. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND PLUMBING CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.

25. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.

26. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.

27. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.

28. SLEEVE ALL EXTERIOR WALL PENETRATIONS.

29. PRIOR TO DEMOLITION WORK, CONTRACTOR SHALL CONDUCT A DETAILED INSPECTION OF EXISTING CONDITIONS AND COMPARE AGAINST DEMOLITION DRAWINGS. THE CONTRACTOR SHALL REQUEST CLARIFICATION AS TO THE REMOVAL OF ANY ELECTRICAL COMPONENTS FOUND IN THE FIELD THAT ARE NOT SPECIFICALLY NOTED TO BE DEMOLISHED.

30. THE DESIGN INTENT IS TO REUSE TO EXTENT POSSIBLE EXISTING ELECTRICAL AND SAFETY SYSTEMS INCLUDING CIRCUIT BREAKERS, WIRING AND CONDUITS, SAFETY AND OTHER HARD WIRED INTERLOCKS, ETC. EXISTING SYSTEMS TO BE REVISED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. SEE PLANS

31. PROVIDE ADDITIONAL SPARE MATERIALS DESCRIBED BELOW. PROVIDE PROTECTIVE COVERING FOR STORAGE & IDENTIFIED WITH LABELS DESCRIBING THE CONTENTS. INCLUDE THE INSTALLATION COST, FITTINGS AND SUPPORTS IN THE BASE BID PROPOSAL.

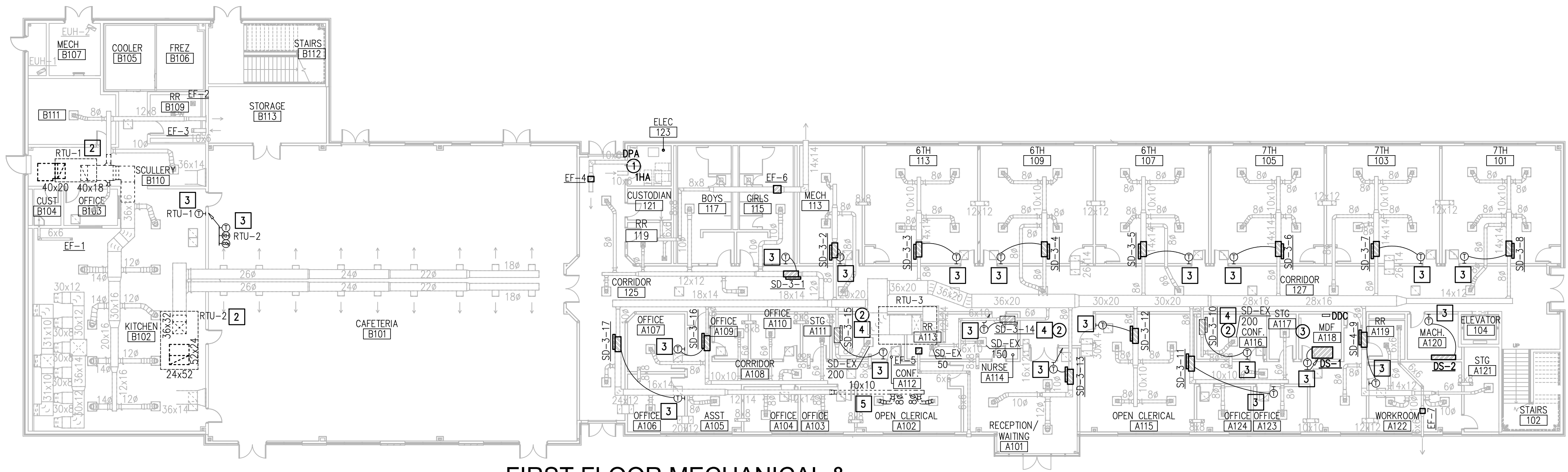
A. 50 LINEAR FEET -- 3/4"--3#10 & #10G

B. 50 LINEAR FEET -- 1/2"--2#12 & #12G

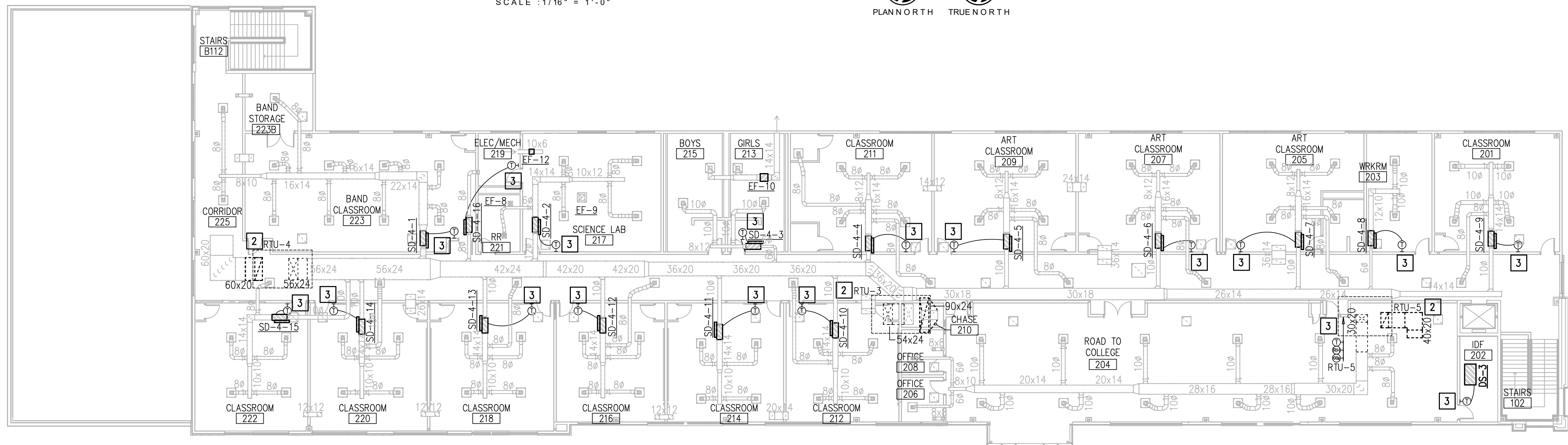
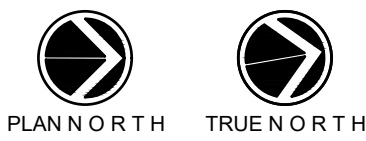
C. 50 LINEAR FEET -- 1"--3#6 & #10G

D. 50 LINEAR FEET -- 1.25"--3#2 & #8G

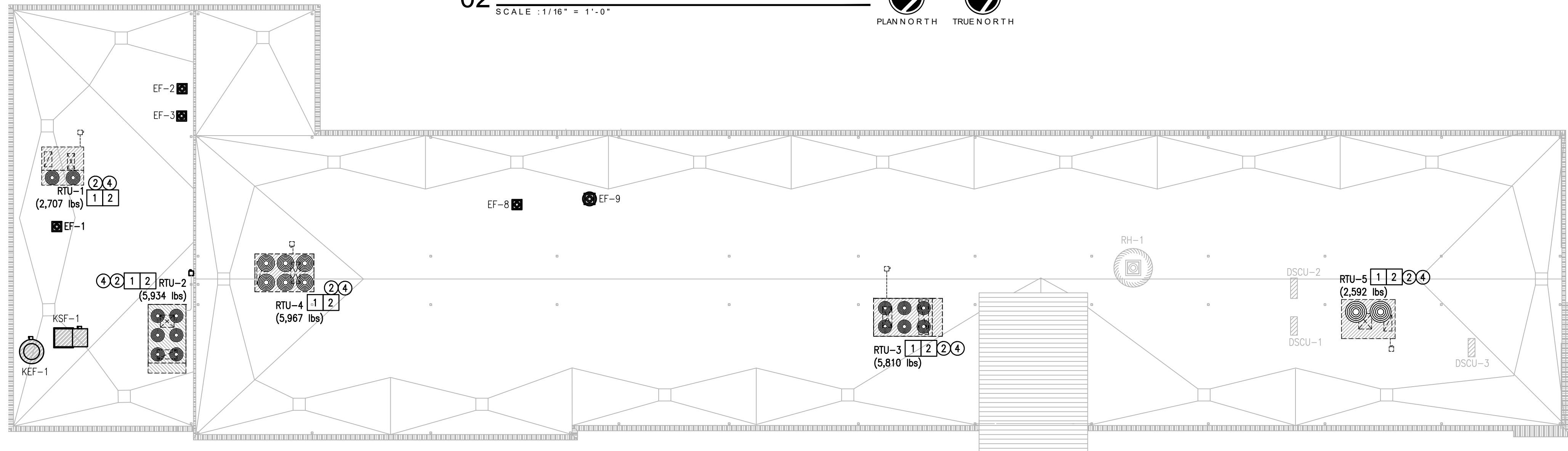
E. 50 LINEAR FEET -- 2"--3#3/0 & #6G
- NO: REVISION: BY:
-
- COPY NO:
- CSP # 41-DMCP-0826
-
- TEXAS
- IDEA DONNA MECHANICAL UPGRADES
- DONNA
-
- DATE: SEPTEMBER 30, 2026
- CHECKED BY: B. BURKE
- DRAWN BY: J. R. / B.T.
- PROJECT NO.: 26v21
- CAD FILE: SHEET:
- ME1.01



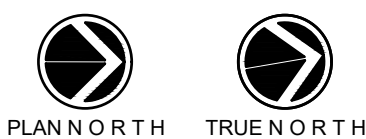
01 FIRST FLOOR MECHANICAL & ELECTRICAL DEMOLITION PLAN
SCALE : 1/16" = 1'-0"



02 SECOND FLOOR MECHANICAL & ELECTRICAL DEMOLITION PLAN
SCALE : 1/16" = 1'-0"



03 ROOF MECHANICAL & ELECTRICAL DEMOLITION PLAN
SCALE : 1/16" = 1'-0"



GENERAL NOTES:

- OWNER MAY WISH TO KEEP DEMOLISHED EQUIPMENT AND MATERIALS. COORDINATE WITH OWNER, AND DISPOSE OF EQUIPMENT AND MATERIALS THAT OWNER DOES NOT RETAIN.
- REMOVE EXISTING CARRIER CON AND IVU CONTROL SYSTEMS, INCLUDING BUT NOT LIMITED TO: CONTROLLERS, CONTROLS ARCHITECTURE, COMMUNICATION BACKBONE, SOFTWARE, SEQUENCES, GRAPHICS, FLOOR PLANS, LCD SPACE SENSORS (T, RH, CO2) AND RELATED WIRING. EXISTING CONTROLLERS AND SPACE SENSORS THAT ARE REMOVED SHALL BE RETURNED TO THE OWNER FOR SPARE PARTS USE. REFER TO SPECIFICATIONS.
- DEMOLISH EXISTING CURBS AND CURB ADAPTERS. COORDINATE WORK WITH ROOFING CONTRACTOR.

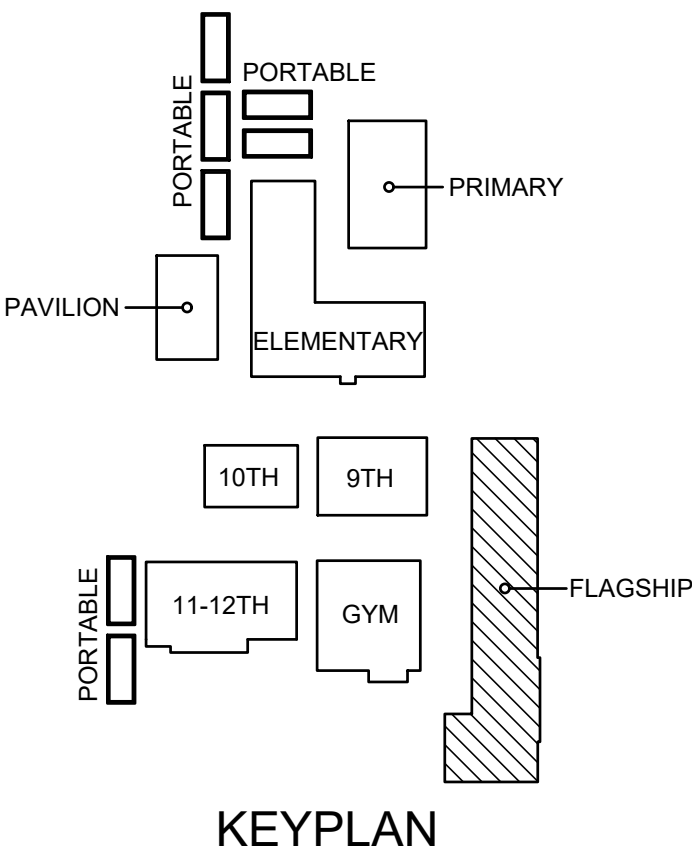
MECHANICAL DEMOLITION KEYED NOTES:

- DEMOLISH EXISTING ROOF TOP UNIT (RTU) AND ASSOCIATED CURB, CURB ADAPTER AND CONTROLS WIRING INCLUDING SENSORS IN THIS APPROXIMATE LOCATION. REFER TO ELECTRICAL NOTES FOR WORK RELATED TO DISCONNECTS, CONDUITS, WIRING, ETC.
- DEMOLISH EXISTING DUCTWORK, TRANSITIONS, FITTINGS, AND FLEX CONNECTORS UNDERNEATH THE EXISTING RTU AND WITHIN THE EXISTING CURB OPENING AS NECESSARY TO ACCOMMODATE NEW UNIT.
- DEMOLISH EXISTING SENSORS, INCLUDING BUT NOT LIMITED TO: T-STATS, RH, AND CO2.
- DEMOLISH EXISTING VAV BOX AS SHOWN. REFER TO NEW PLAN FOR MORE INFORMATION.
- DEMOLISH EXISTING DUCTWORK, TRANSITIONS, FITTINGS, AND FLEX CONNECTORS AS SHOWN. RETAIN EXISTING DIFFUSERS FOR REUSE.

ELECTRICAL KEYED NOTES:

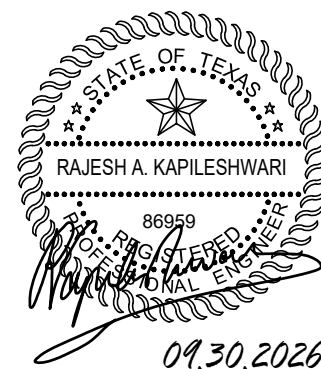
- APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING EXISTING HVAC EQUIPMENT.
- DISCONNECT EXISTING HVAC EQUIPMENT FOR REPLACEMENT. SEE EQUIPMENT CONNECTION SCHEDULE.
- APPROXIMATE LOCATION OF EXISTING NOTIFIER NFS-320 FIRE ALARM CONTROL PANEL. PRIME CONTRACTORS SHALL CONTACT PRE-APPROVED SUBCONTRACTORS TO WORK ON SYSTEMS INCLUDING BUT NOT LIMITED TO: SUPERIOR ALARMS - (956) 793-9771.
- DEPROGRAM AND TEMPORARILY DISCONNECT EXISTING DUCT SMOKE DETECTOR.

LEGEND:	
	EQUIPMENT TO BE DEMOLISHED
	EQUIPMENT TO REMAIN
	EQUIPMENT CONTROLS TO BE REPLACED
	EXISTING DUCTWORK TO REMAIN
	DUCTWORK TO BE DEMOLISHED
	EXISTING T-STAT TO REMAIN
	T-STAT TO BE REPLACED
	EXISTING AIR DEVICE TO REMAIN



NO: REVISION: BY:

COPY NO:
CSP # 41-DMCP-0826



TEXAS

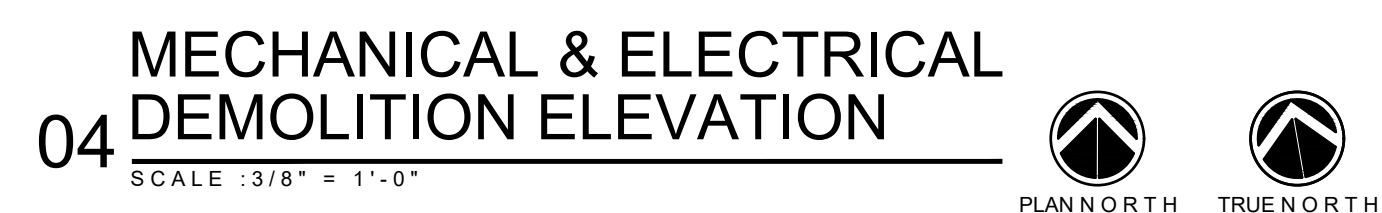
IDEA DONNA MECHANICAL UPGRADES

DONNA

ethos
engineering
1126 SOUTH COMMERCE ST.
HARLINGEN, TX
PHONE: 956-230-3425
TEXAS REGISTERED
ENGINEERING FIRM
F-15998

DATE: SEPTEMBER 30, 2026
CHECKED BY: B. BURKE
DRAWN BY: J. R. / B.T.
PROJECT NO.: 26v21
CAD FILE:
SHEET:

ME2.01



KEYPLAN

PAVILION

PORTABLE

PORTABLE

PORTABLE

PORTABLE

PRIMARY

ELEMENTARY

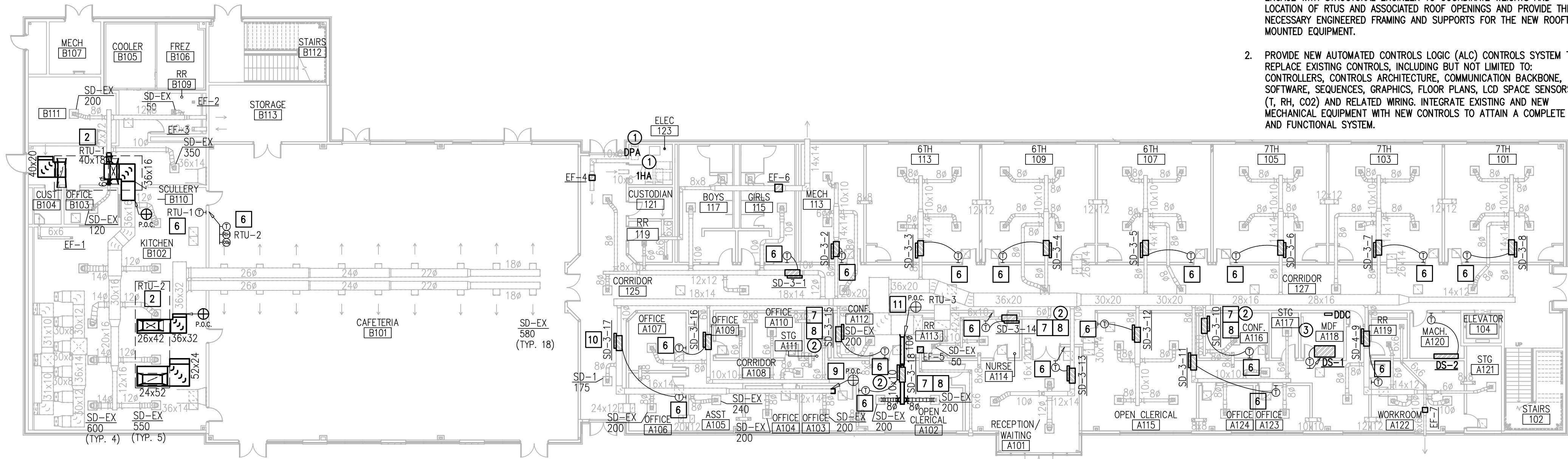
10TH

9TH

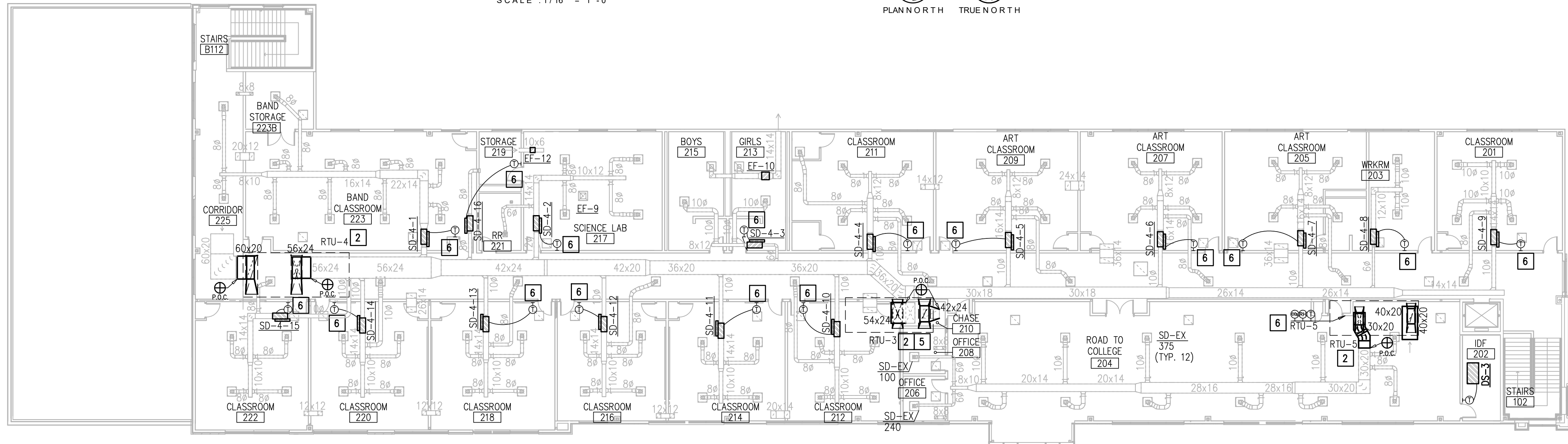
11-12TH

GYM

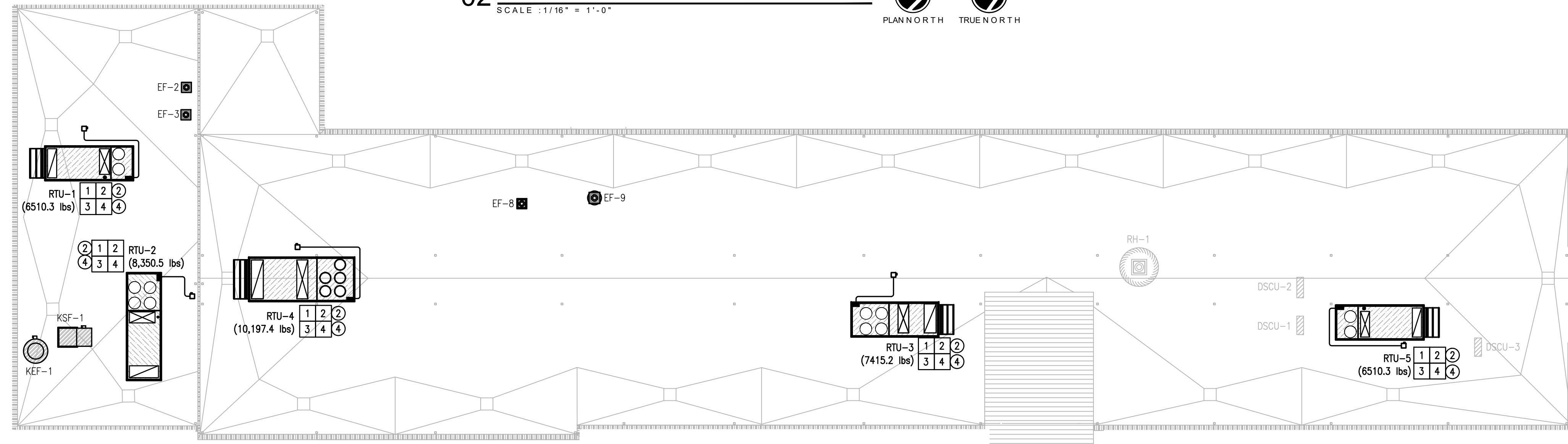
FLAGSHIP



01 FIRST FLOOR MECHANICAL & ELECTRICAL RENOVATION PLAN
SCALE : 1/16" = 1'-0"



02 SECOND FLOOR MECHANICAL & ELECTRICAL RENOVATION PLAN
SCALE : 1/16" = 1'-0"



03 ROOF MECHANICAL & ELECTRICAL RENOVATION PLAN
SCALE : 1/16" = 1'-0"

GENERAL NOTES:

- PRIOR TO ORDERING AND INSTALLING NEW RTU, CONTRACTOR SHALL ENGAGE WITH STRUCTURAL ENGINEER TO COORDINATE WEIGHTS AND LOCATION OF RTUS AND ASSOCIATED ROOF OPENINGS AND PROVIDE THE NECESSARY ENGINEERED FRAMING AND SUPPORTS FOR THE NEW ROOFTOP MOUNTED EQUIPMENT.
- PROVIDE NEW AUTOMATED CONTROLS LOGIC (ALC) CONTROLS SYSTEM TO REPLACE EXISTING CONTROLS, INCLUDING BUT NOT LIMITED TO: CONTROLLERS, CONTROLS ARCHITECTURE, COMMUNICATION BACKBONE, SOFTWARE, SEQUENCES, GRAPHICS, FLOOR PLANS, LCD SPACE SENSORS (T, RH, CO2) AND RELATED WIRING. INTEGRATE EXISTING AND NEW MECHANICAL EQUIPMENT WITH NEW CONTROLS TO ATTAIN A COMPLETE AND FUNCTIONAL SYSTEM.

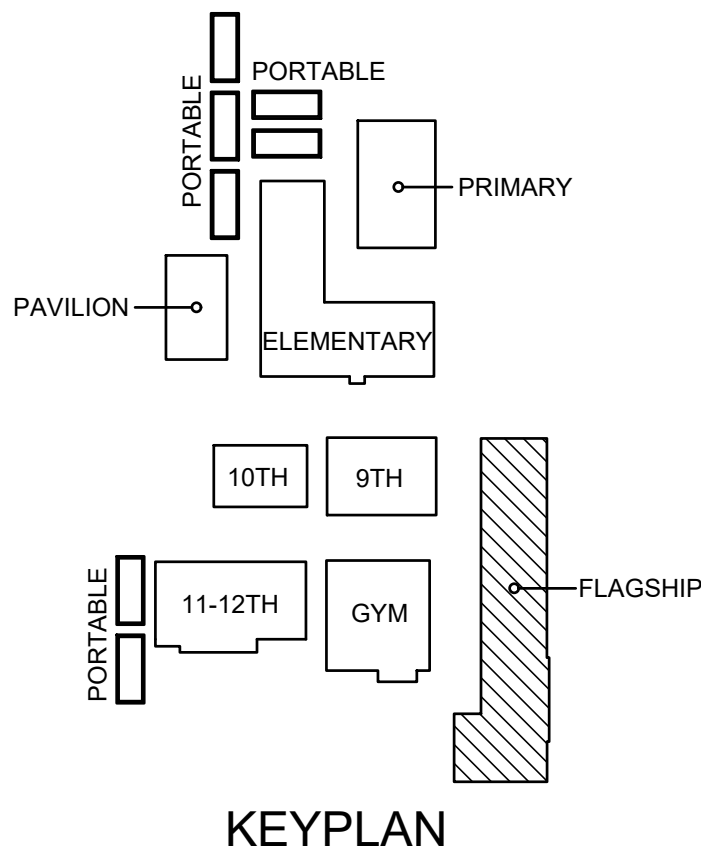
MECHANICAL KEYED NOTES:

- PROVIDE ROOF TOP UNIT (RTU) ON NEW ROOF CURB AS SCHEDULED. ORIENT RTU AS INDICATED TO OPTIMIZE DUCTWORK. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. SECURE EQUIPMENT TO ROOF STRUCTURE. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES. PROVIDE WINDSTORM CERTIFICATION OF RTU INSTALLATION. REFER TO DIV 7 FOR MORE INFORMATION.
- CONNECT FULL-SIZE DUCT WORK FROM CEILING SPACE BELOW TO NEW RTU S/A & R/A OPENINGS AS APPLICABLE. TRANSITION AS NECESSARY.
- PROVIDE COPPER CONDENSATE DRAIN LINES WITH P-TRAPS, AND EXTEND TO EXISTING CONDENSATE DRAIN SYSTEM ON ROOF. SUPPORT PIPING WITH PIPING SUPPORTS AS DETAILED.
- PROVIDE ROOF CURBS OF 24" HEIGHT TO ALLOW FOR DUCT TRANSITIONS WITHIN CURB. TRANSITIONS BETWEEN EQUIPMENT CONNECTIONS AND ROOF PENETRATIONS SHALL BE PROVIDED WITHIN THE ROOF CURB, OR VIA PRESSURIZED AND SEALED ROOF CURBS.
- CONNECT NEW S/A & R/A DUCTS INTO EXISTING S/A & R/A DUCTS DOWN THROUGH CHASE. TRANSITION AS NECESSARY.
- PROVIDE TEMPERATURE, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. IN COMPLIANCE WITH ADA REQUIREMENTS. COORDINATE LOCATION WITH OWNER.
- PROVIDE VAV TERMINAL UNIT AS SCHEDULED, PROVIDE DUCT TRANSITION AS NEEDED. MAINTAIN MINIMUM 4'-0" STRAIGHT DUCT SECTION UPSTREAM OF BOX AND MINIMUM 3'-0" CLEARANCE IN FRONT OF THE ACCESS PANEL. SUPPORT WITH GALVANIZED ALL-THREAD AS SHOWN IN DETAIL.
- BALANCE NEW VAV BOX AND ASSOCIATED AIR DIFFUSERS TO THE SCHEDULED AND SHOWN CFM.
- CAP OFF EXISTING BRANCH DUCTWORK AS SHOWN AND INSULATE CAP TO MATCH EXISTING.
- RE-BALANCE EXISTING VAV BOX (SD-3-17) TO SUM OF REMAINING EXISTING DIFFUSER'S CFM. RE-BALANCE DIFFUSERS TO SHOWN CFM.
- CONNECT NEW SUPPLY DUCTWORK INTO EXISTING DUCTWORK AT THIS APPROXIMATE LOCATION. PROVIDE NEW DUCTWORK, FITTINGS, TRANSITIONS, DAMPERS, ETC. TO SERVE NEW VAV BOX. REUSE EXISTING DIFFUSERS. IF NECESSARY, RESEAT EXISTING RETURN GRILLE AND ASSOCIATED PLENUM BOX TO ADJACENT CEILING TILE TO FACILITATE NEW DUCTWORK INSTALLATION.

ELECTRICAL KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING NEW HVAC EQUIPMENT.
- CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.
- APPROXIMATE LOCATION OF EXISTING NOTIFIER NFS-320 FIRE ALARM CONTROL PANEL. PRIME CONTRACTORS SHALL CONTACT PRE-APPROVED SUBCONTRACTORS TO WORK ON SUCH SYSTEM AS BUT NOT LIMITED TO: SUPERIOR ALARMS - (956) 793-9771.
- REPROGRAM AND RECONNECT EXISTING DUCT SMOKE DETECTOR.

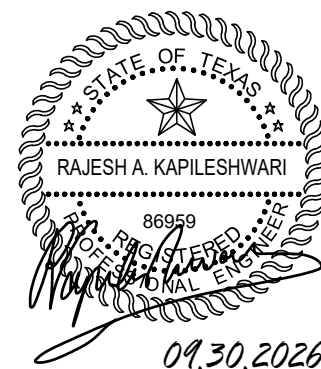
LEGEND:	
	NEW EQUIPMENT
	EXISTING EQUIPMENT
	EQUIPMENT CONTROLS TO BE REPLACED
	NEW DUCTWORK
	EXISTING DUCTWORK
	EXISTING T-STAT
	NEW T-STAT
	EXISTING AIR DEVICE



NO: REVISION: BY:

COPY NO:

CSP #41-DMCP-0826



TEXAS

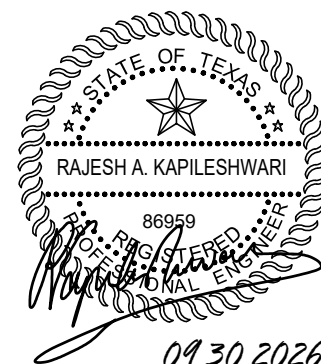
IDEA DONNA MECHANICAL UPGRADES

DONNA



DATE: SEPTEMBER 30, 2026
CHECKED BY: B. BURKE
DRAWN BY: J. R. / B.T.
PROJECT NO.: 26v21
CAD FILE:
SHEET:

ME3.01



GENERAL NOTES:

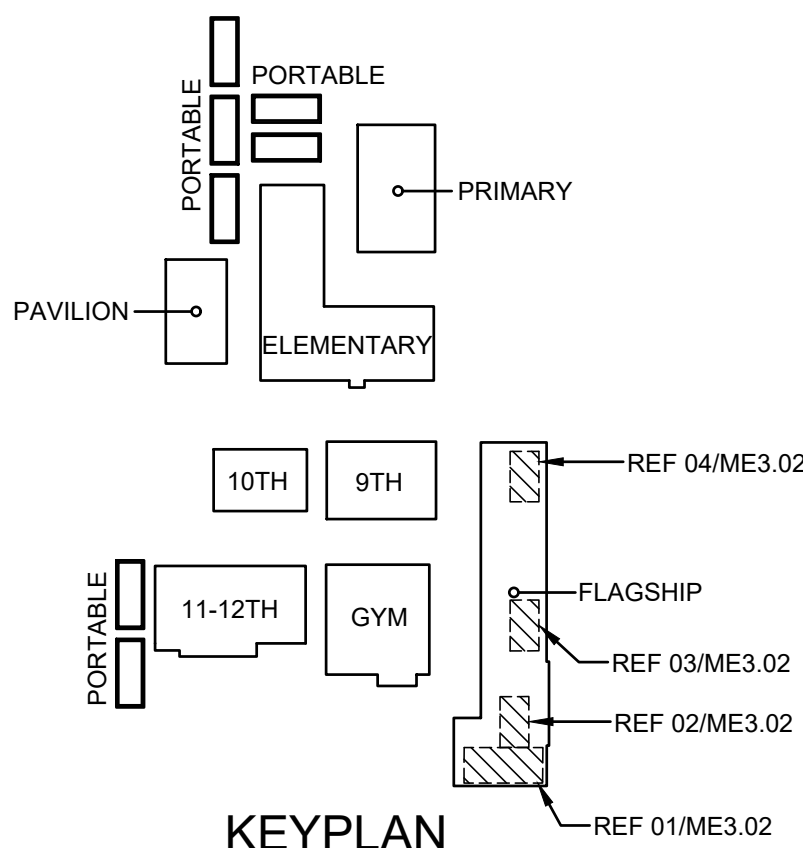
- WHERE THE ROOF CURB IS USED TO FORM THE AIR PATH BETWEEN THE BOTTOM OPENINGS OF THE NEW RTU AND THE EXISTING DUCTWORK AT THE METAL-DECK LEVEL, CONFIGURE THE INTERIOR OF THE CURB TO FORM SEPARATE SUPPLY AND RETURN AIR PLENUMS. PROVIDE AIRTIGHT, THERMALLY INSULATED INTERNAL PARTITIONS TO COMPLETELY SEPARATE THE SUPPLY AIR PATH FROM THE RETURN AIR PATH AND ISOLATE BOTH AIR PATHS FROM ALL UNUSED OR UNCONDITIONED PORTIONS OF THE CURB. THERMALLY INSULATE ALL CURB SURFACES FORMING PART OF THE SUPPLY OR RETURN AIR PLENUMS.
- ROOF REPAIRS SHALL BE PERFORMED BY A QUALIFIED ROOFING CONTRACTOR. MATCH THE EXISTING ROOF ASSEMBLY AND COMPLY WITH THE EXISTING ROOF MANUFACTURER'S REQUIREMENTS. MAINTAIN THE EXISTING ROOF WARRANTY, WHERE APPLICABLE.
- MAINTAIN EXISTING ROOF SLOPES AND DRAINAGE PATTERNS. COMPLETED ROOF REPAIRS SHALL NOT CREATE PONDING WATER AROUND THE NEW EQUIPMENT.
- PROVIDE TEMPORARY WEATHERTIGHT PROTECTION OF ALL ROOF OPENINGS DURING CONSTRUCTION. DO NOT LEAVE THE BUILDING INTERIOR EXPOSED TO WEATHER.
- ROOF REPAIR AND METAL-DECK INFILL AREAS SHOWN ARE BASED ON AVAILABLE ORIGINAL DESIGN AND RECORD DRAWINGS AND ARE INTENDED TO INDICATE THE GENERAL ANTICIPATED EXTENT OF THE WORK. LOCATIONS, CONFIGURATIONS, AND LIMITS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VISIT THE SITE, EXAMINE THE EXISTING CONDITIONS, AND FIELD VERIFY THE ACTUAL SIZE AND LOCATION OF THE EXISTING RTU CURBS AND REQUIRED REPAIR AREAS. PROVIDE ALL ROOF REPAIRS, METAL-DECK INFILL, FRAMING MODIFICATIONS, AND ASSOCIATED WORK REQUIRED FOR A COMPLETE INSTALLATION, REGARDLESS OF MINOR VARIATIONS FROM THE CONDITIONS SHOWN.

MECHANICAL KEYED NOTES:

- PATCH AND REPAIR PORTIONS OF EXISTING ROOF OPENINGS LOCATED OUTSIDE THE NEW ROOF CURB FOOTPRINT. PROVIDE NEW METAL ROOF DECK, INSULATION, COVER BOARD, ROOFING MEMBRANE, FLASHING, AND ASSOCIATED COMPONENTS TO MATCH THE EXISTING ADJACENT ROOF CONSTRUCTION. PROVIDE A COMPLETE WEATHERTIGHT REPAIR. FIELD VERIFY ACTUAL EXTENT OF WORK.
- INFILL UNUSED PORTIONS OF EXISTING ROOF DECK OPENINGS LOCATED WITHIN AND CONCEALED BELOW THE NEW ROOF CURB. PROVIDE NEW METAL ROOF DECK TO MATCH THE EXISTING DECK TYPE, PROFILE, GAGE, AND ORIENTATION. PROVIDE SUPPORT AND ATTACHMENT IN ACCORDANCE WITH THE STRUCTURAL DRAWINGS. FIELD VERIFY ACTUAL EXTENT OF WORK.
- FIELD VERIFY THE SIZE AND LOCATION OF EXISTING ROOF PENETRATIONS TO BE REUSED. COORDINATE FINAL SUPPLY AND RETURN OPENING LOCATIONS WITH THE APPROVED RTU AND ROOF CURB DIMENSIONS. MODIFY EXISTING STRUCTURAL FRAMING IN ACCORDANCE WITH THE STRUCTURAL DRAWINGS. PROVIDE INSULATED DUCT TRANSITIONS OR USE THE INTERIOR OF THE ROOF CURB TO FORM THE SUPPLY AND RETURN AIR PATHS IN ACCORDANCE WITH GENERAL NOTE 1. SEAL ALL UNUSED PORTIONS OF THE EXISTING ROOF OPENINGS AND PROVIDE A COMPLETE AIRTIGHT, INSULATED, AND WEATHERTIGHT INSTALLATION.

LEGEND:

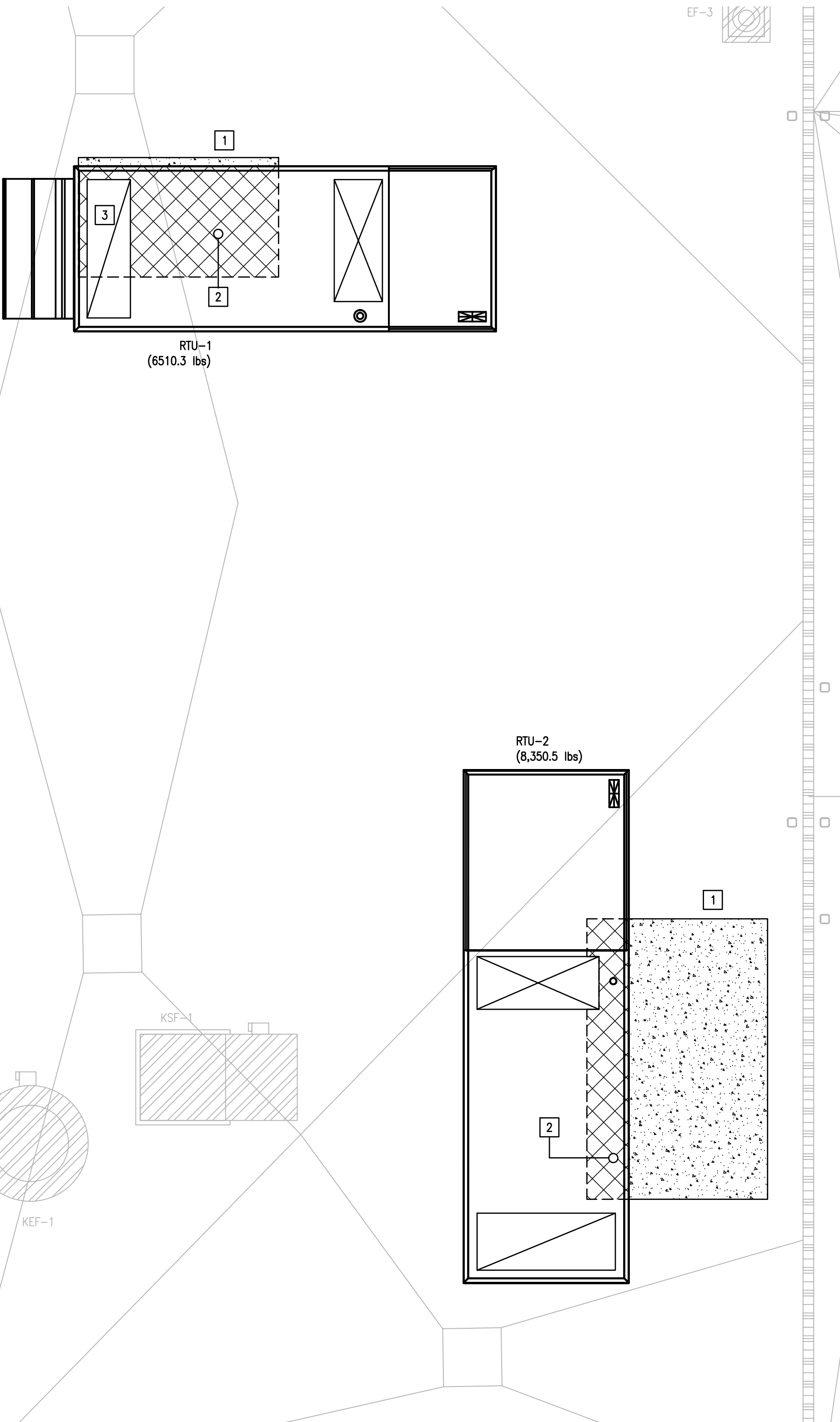
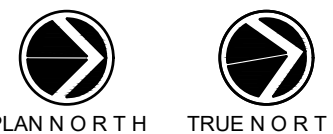
	NEW EQUIPMENT
	EXISTING EQUIPMENT
	COMPLETE ROOF ASSEMBLY REPAIR
	METAL DECK INFILL BELOW NEW RTU
	SUPPLY AIR OPENING
	RETURN AIR OPENING



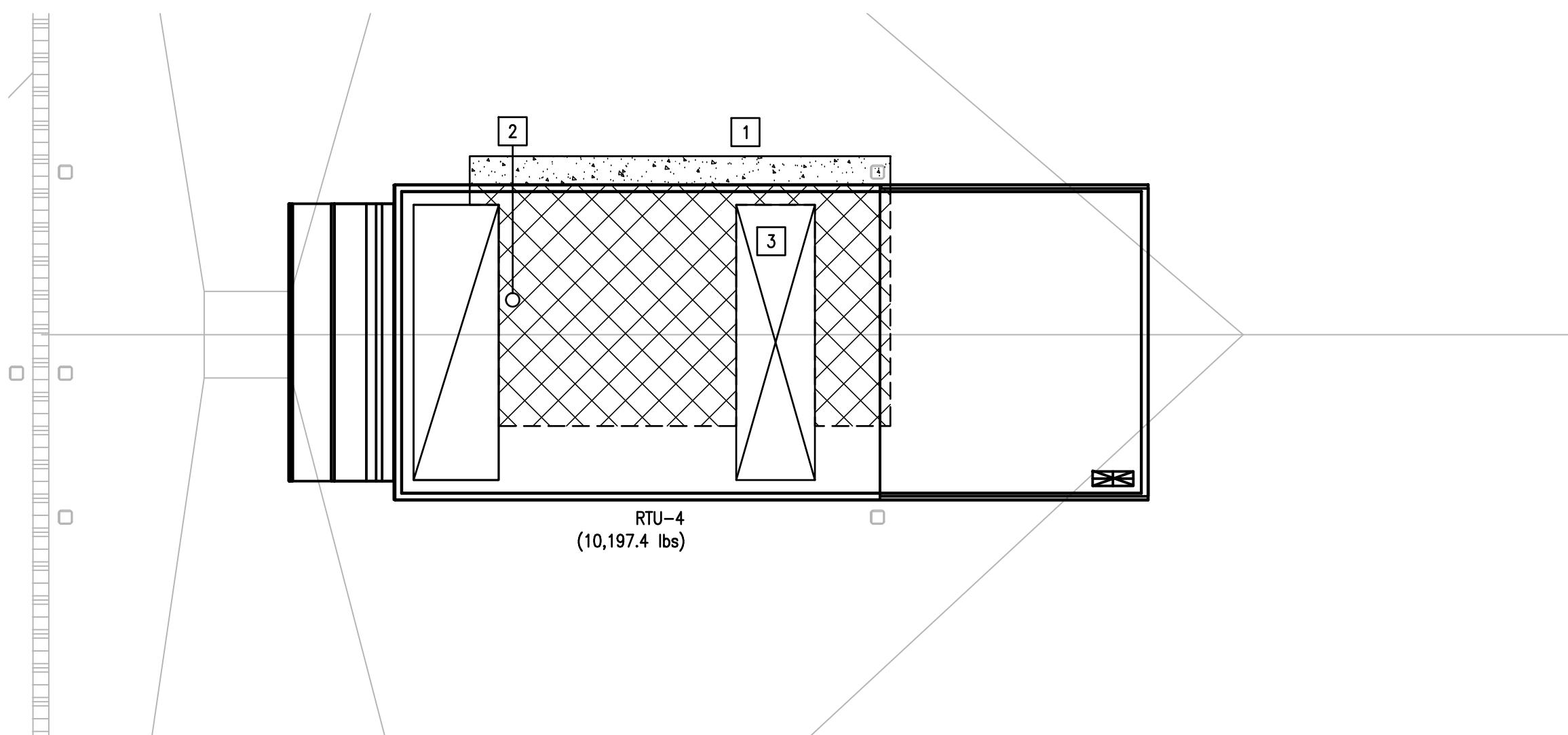
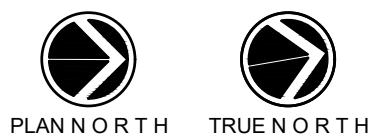
KEYPLAN

01 ROOF PATCH & REPAIR
RENOVATION PLAN – RTU-1 & RTU-2

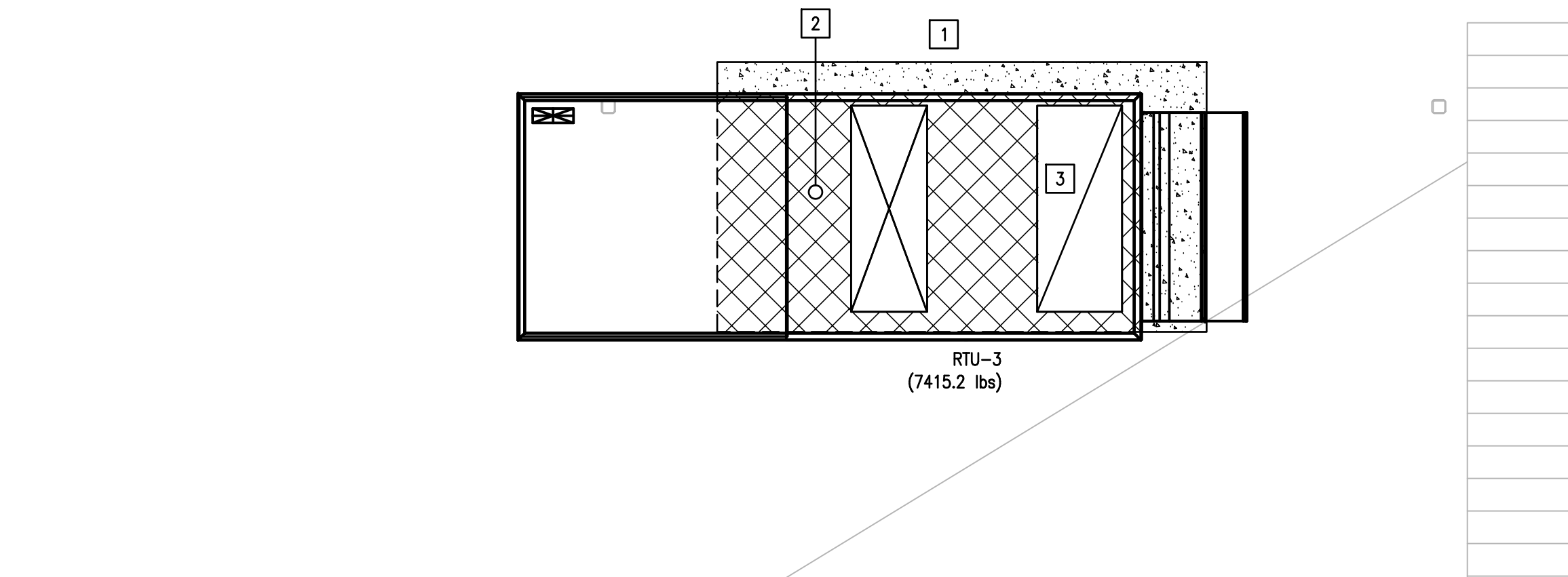
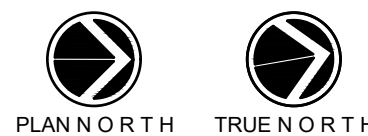
SCALE : 1/4" = 1'-0"

02 ROOF PATCH & REPAIR
RENOVATION PLAN – RTU-4

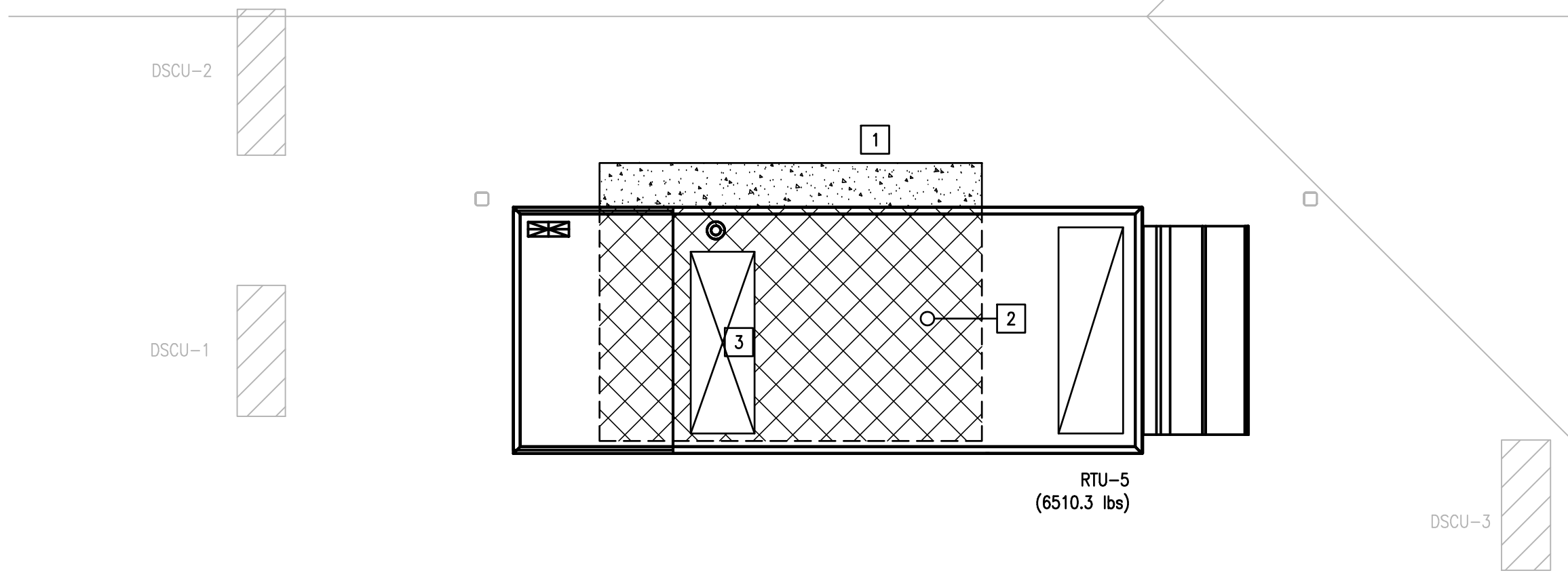
SCALE : 1/4" = 1'-0"

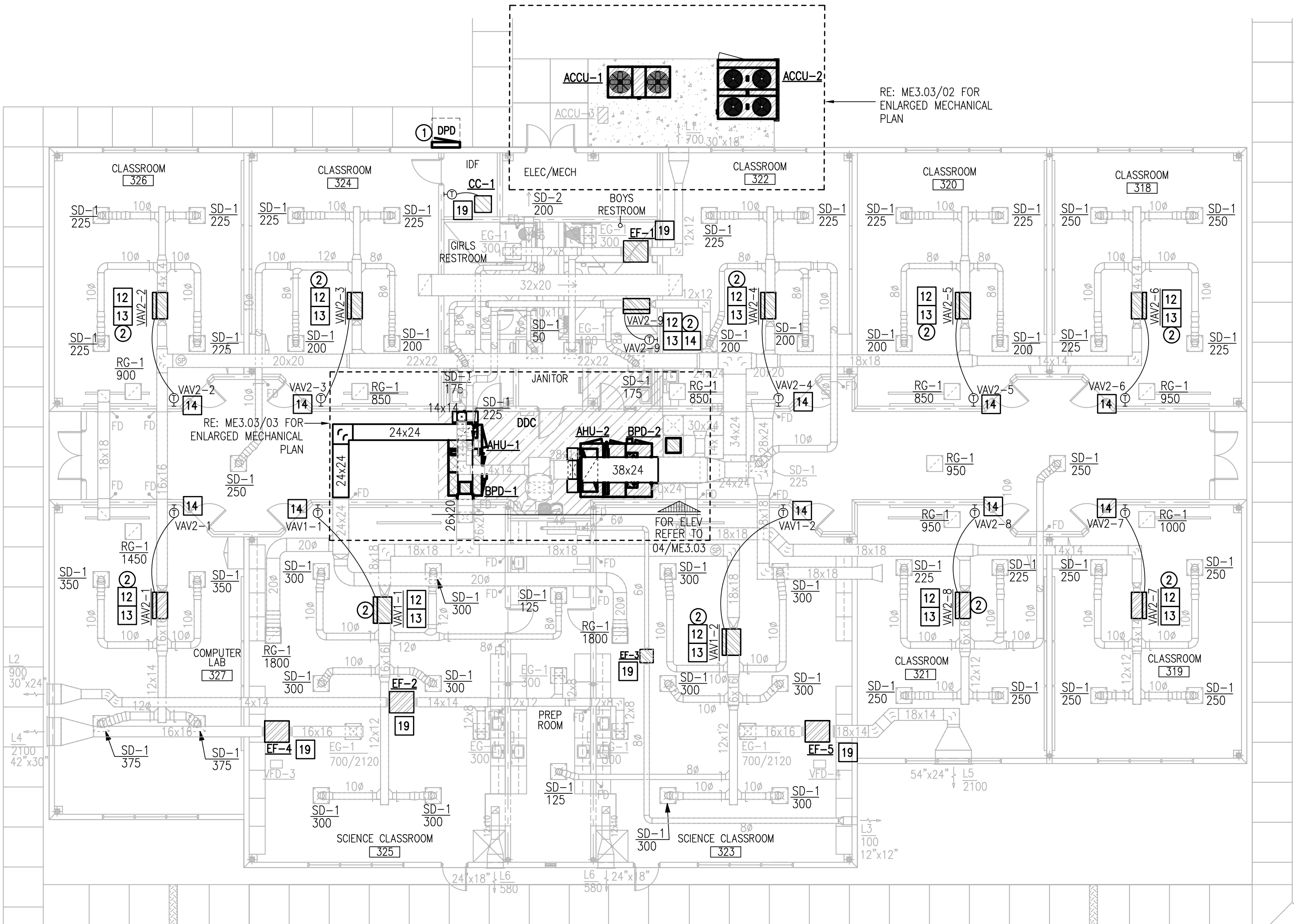
03 ROOF PATCH & REPAIR
RENOVATION PLAN – RTU-3

SCALE : 1/4" = 1'-0"

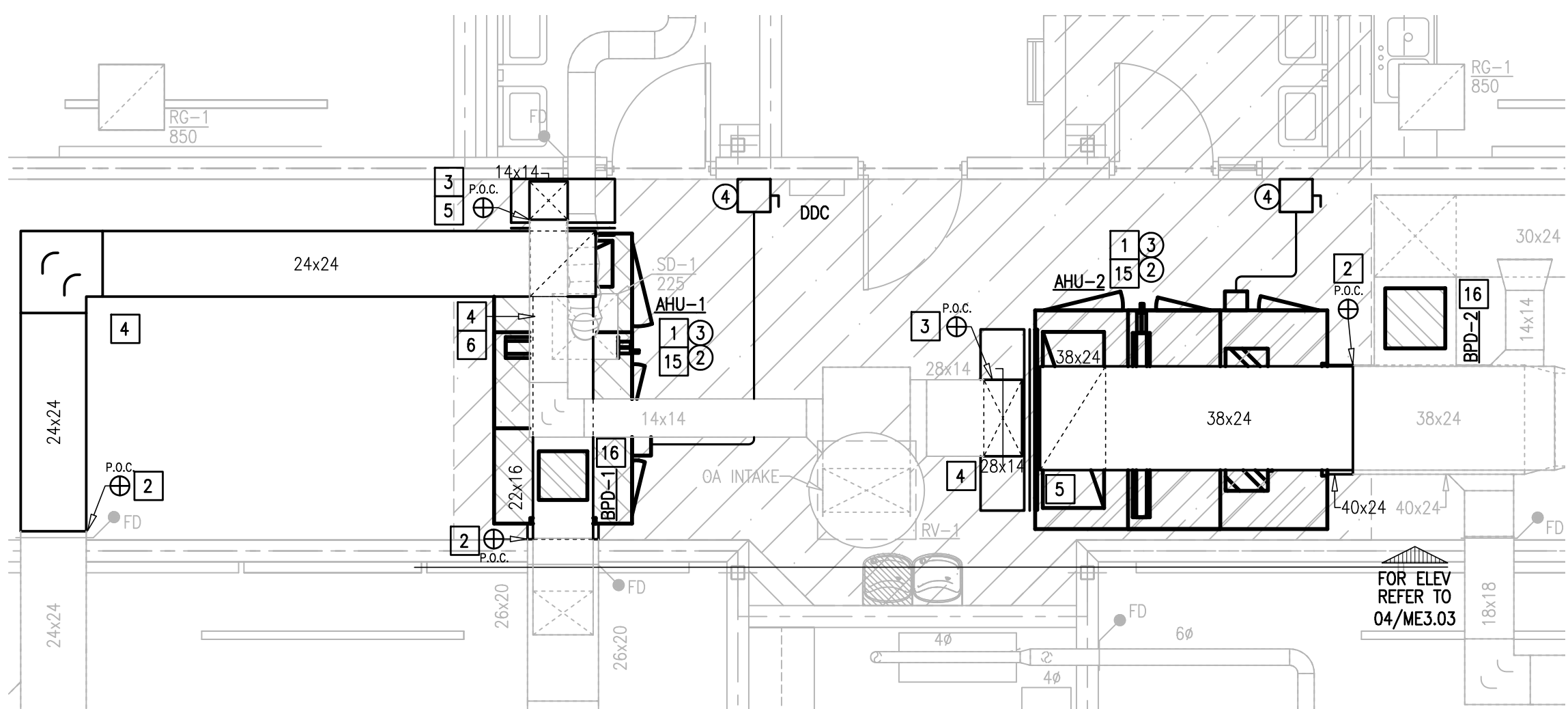
04 ROOF PATCH & REPAIR
RENOVATION PLAN – RTU-5

SCALE : 1/4" = 1'-0"

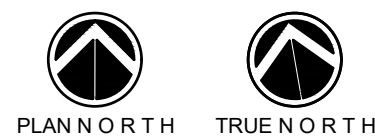




MECHANICAL &
01 ELECTRICAL RENOVATION PLAN
SCALE : 3/32" = 1'-0"



ENLARGED MECHANICAL &
03 ELECTRICAL RENOVATION PLAN
SCALE : 1/4" = 1'-0"



GENERAL NOTES:

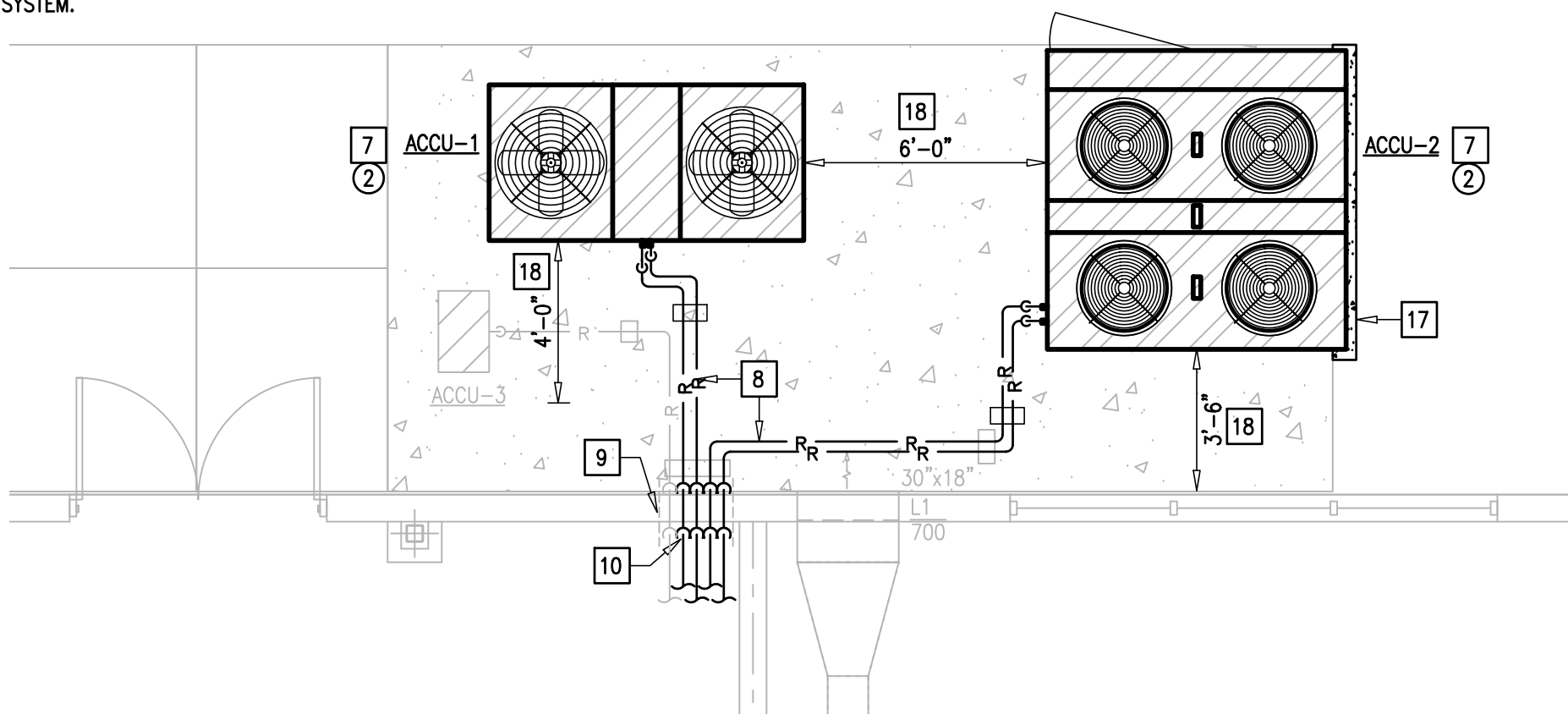
1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.
2. REUSE NEWLY REPLACED CONTROLLERS AT AHUS AND VAV BOXES. ALL OTHER CONTROLS SCOPE APPLIES, INCLUDING NEW SENSORS, DAMPER ACTUATORS, FIELD DEVICES FOR NEW EQUIPMENT, PROGRAMMING, UPDATED GRAPHICS, INTEGRATION WORK, FIELD VERIFICATION, AND FULL RECOMMISSIONING TO ENSURE THAT THE NEW EQUIPMENT OPERATES IN ACCORDANCE WITH THE PROJECT REQUIREMENTS.

MECHANICAL KEYED NOTES:

- 1 PROVIDE NEW DX AIR HANDLING UNIT AS SCHEDULED. ROUTE COPPER CONDENSATE LINE TO EXISTING PLUMBING RECEPTACLE AND INSULATE PER SPECIFICATIONS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES, AND ALIGN TO MINIMIZE DUCTWORK TRANSITIONS BETWEEN UNIT OPENINGS AND DUCT TRUNKS. REFER TO AHU ELEVATION. COORDINATE UNIT DIMENSIONS, ORIENTATION, CONFIGURATION, AND CONNECTION LOCATIONS PRIOR TO ORDERING.
- 2 CONNECT NEW SUPPLY/RETURN AIR DUCT INTO EXISTING SUPPLY/RETURN AIR DUCT AT THIS APPROXIMATE LOCATION.
- 3 CONNECT NEW OUTSIDE AIR DUCT INTO EXISTING OUTSIDE AIR DUCT AT THIS APPROXIMATE LOCATION. ROUTE OUTSIDE AIR DUCT TO INTAKE CONNECTION AT AHU. ROUTE DUCT AS HIGH AS POSSIBLE. INSULATE WITH 2" DUCT WRAP. PROVIDE MANUAL DAMPER.
- 4 PROVIDE NEW DUCTWORK, TRANSITIONS, VALVES, AND ASSOCIATED AIR DEVICES AS NECESSARY TO ATTAIN A COMPLETE AND FUNCTIONAL SYSTEM.

MECHANICAL KEYED NOTES (CONT.):

- 5 PROVIDE NEW DAMPER ACTUATORS AT OUTSIDE AND RETURN AIR DUCT CONNECTIONS OF REPLACEMENT AHUS. PROVIDE NEW CONTROLS, CONTROLLERS, SENSORS, GRAPHICS, SEQUENCES, ETC., AT THE REPLACEMENT AHUS AND ACCUS.
- 6 DUCTWORK ROUTING IS DIAGRAMMATIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ENGINEER IN CASE OF CONFLICTS. (TYP.)
- 7 PROVIDE NEW AIR COOLED CONDENSING UNIT AND INSULATE REFRIGERANT PIPING PER SPECIFICATIONS. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES AND REUSE EXISTING HOUSEKEEPING CONCRETE PADS TO ACCOMMODATE NEW EQUIPMENT. REFRIGERANT PIPING SHOWN IS STRICTLY SCHEMATIC, VERIFY NUMBER OF CIRCUITS AND PIPE SIZES WITH MANUFACTURER'S DATA. BOLT EQUIPMENT DOWN TO CONCRETE SLAB. ATTACHMENT SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES.
- 8 PROVIDE NEW 1" INSULATION ON ALL REFRIGERANT LINES BOTH NEW AND EXISTING. PROVIDE ALUMINUM JACKET ON EXPOSED REFRIGERANT LINES. SEE SPECIFICATIONS. PROVIDE REFRIGERANT LINE SUPPORTS PER SPECIFICATIONS. SEE ASSOCIATED DETAIL.
- 9 RETAIN EXISTING SLEEVE AT ALL PENETRATIONS PER SPECIFICATIONS WHERE POSSIBLE. SEAL AROUND NEW PIPING WITH FIRE PROOF CAULKING. PROVIDE NEW ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION BOTH INSIDE AND OUTSIDE TO PROVIDE FINISHED LOOK.



ENLARGED MECHANICAL &
02 ELECTRICAL RENOVATION PLAN
SCALE : 1/4" = 1'-0"



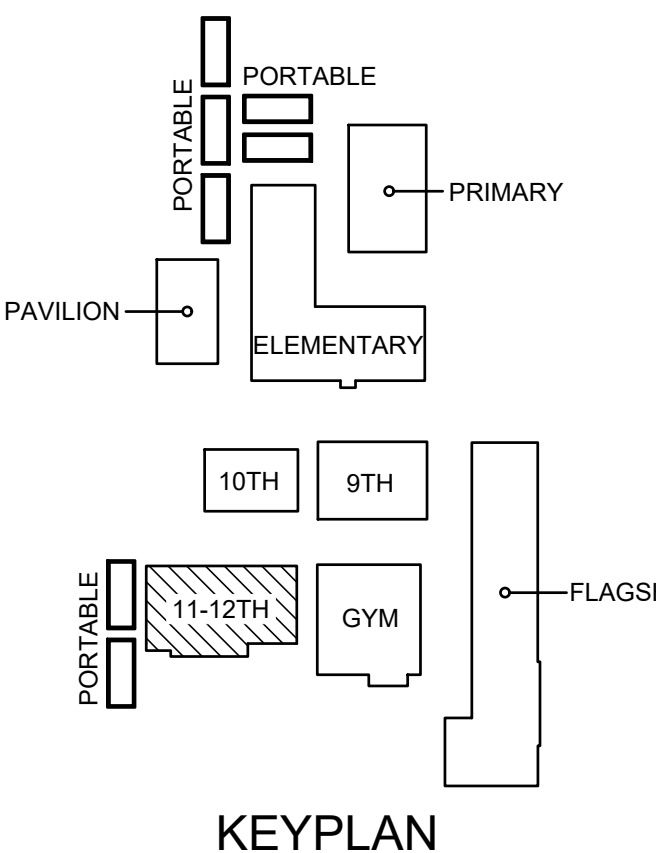
MECHANICAL KEYED NOTES (CONT.):

- 10 ROUTE NEW REFRIGERANT PIPING TO INDOOR UNIT. COORDINATE ROUTING WITH OTHER TRADES PRIOR TO INSTALLATION. RISE WITH REFRIGERANT PIPING EXPOSED INSIDE MECHANICAL ROOM TO ABOVE CEILING LEVEL AND CONTINUE TO INDOOR UNIT TO AVOID EXPOSED PIPING WITHIN THE SPACE. REUSE EXISTING SLEEVE AT WALL PENETRATION. SEAL AIRTIGHT AROUND PIPE PENETRATION.
- 11 PROVIDE NEW MEZZANINE RAILING FOLLOWING SUCCESSFUL INSTALLATION OF NEW AHUS.
- 12 PROVIDE VAV TERMINAL UNIT AS SCHEDULED. PROVIDE DUCT TRANSITION AS NEEDED. MAINTAIN MINIMUM 4'-0" STRAIGHT DUCT SECTION UPSTREAM OF BOX AND MINIMUM 3'-0" CLEARANCE IN FRONT OF THE ACCESS PANEL. SUPPORT WITH GALVANIZED ALL-THREAD AS SHOWN IN DETAIL.
- 13 BALANCE NEW VAV BOX AND ASSOCIATED AIR DIFFUSERS TO THE SCHEDULED AND SHOWN CFM.
- 14 PROVIDE TEMPERATURE, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. IN COMPLIANCE WITH ADA REQUIREMENTS. COORDINATE WITH OWNER.
- 15 AFTER ALL NEW EQUIPMENT HAS BEEN INSTALLED PERFORM TAB ACTIVITIES ON THIS SYSTEM, INCLUDING BUT NOT LIMITED TO: AHUS, VAVS, AIR DEVICES, ETC. REFER TO ASSOCIATED SCHEDULES AND SPECIFICATIONS FOR MORE INFORMATION.
- 16 PROVIDE NEW BYPASS DAMPER AS SCHEDULED AND NEW DUCTWORK AS SHOWN TO ATTAIN A COMPLETE AND FUNCTIONAL BYPASS SYSTEM.
- 17 PROVIDE HOUSEKEEPING PAD EXTENSION AS SHOWN TO ACCOMMODATE REPLACEMENT ACCU. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- 18 ENSURE ACCU MAINTAINS 6'-0" CLEARANCE BETWEEN ADJACENT UNITS, 4'-0" CLEARANCE FOR SERVICE, AND 3'-6" CLEARANCE FROM SOLID AIRFLOW OBSTRUCTIONS AS REQUIRED BY EQUIPMENT MANUFACTURER. EXTEND CONCRETE PAD AS NECESSARY.
- 19 PROVIDE NEW CONTROLS AND GRAPHICS AT SHOWN EQUIPMENT. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

ELECTRICAL KEYED NOTES:

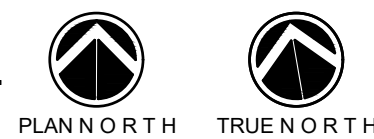
- 1 APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING NEW HVAC EQUIPMENT.
- 2 CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.
- 3 REPROGRAM AND RECONNECT EXISTING DUCT SMOKE DETECTORS.
- 4 PROVIDE NEW DISCONNECT SWITCH SERVING NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.

LEGEND:	
	NEW EQUIPMENT
	EXISTING EQUIPMENT
	NEW DUCTWORK
	EXISTING DUCTWORK
	EXISTING T-STAT
	NEW T-STAT
	EXISTING AIR DEVICE
	NEW PIPING
	EXISTING PIPING



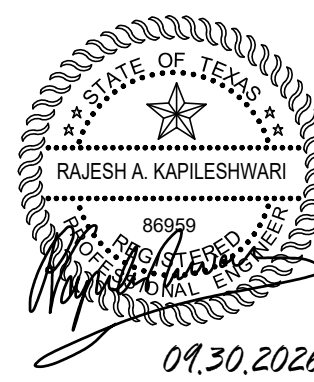
KEYPLAN

MECHANICAL & ELECTRICAL
04 RENOVATION ELEVATION
SCALE : 3/8" = 1'-0"



NO. REVISION: BY:

COPY NO:
CSP #41-DMCP-0826



TEXAS

IDEA DONNA MECHANICAL UPGRADES

DONNA



DATE: SEPTEMBER 30, 2026
CHECKED BY: B. BURKE
DRAWN BY: J. R. / B.T.
PROJECT NO.: 26v21
CAD FILE:
SHEET:

ME3.03

AIR HANDLING UNIT SCHEDULE

11-12TH BUILDING																	
MARK	UNIT TYPE	EXISTING MFR/MODEL	TOTAL CFM	OUTSIDE AIR CFM	ESP IN WG	FAN TYPE	EX. MIN MOTOR HP	MAX MOTOR bHP	ELECTRICAL V-PH-HZ	COOLING				WEIGHT (LBS.)	NOTES	MANUFACTURER	MODEL NUMBER
										TOTAL BTUH	SENS. BTUH	EAT DB(WB/F)	LAT DB(WB/F)				
AHU-1	HORIZONTAL DX SPLIT	TRANE / MCCB008UA0C0UA	3,850	1,300	1.6	ECM	6	3.79	460-3-60	186,640	96,440	77.7 / 69.6	54.8/54.5	892	ALL	TRANE	CSAA008
AHU-2	HORIZONTAL DX SPLIT	TRANE / MCCB021UA0C0UA	9,350	3,000	1.6	ECM	6 HP X2	7.256	460-3-60	454,870	232,060	77.6 / 69.3	54.98/53.98	1506	ALL	TRANE	CSAA021

NOTES:

- MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL". SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND SUBSTITUTION PROCEDURES.
- ESP IS STRICTLY EXTERNAL STATIC PRESSURE AND IS IN ADDITION TO ANY FILTERS, COILS, HEATERS OR OTHER ACCESSORIES INCLUDED WITH THE AIR HANDLING UNIT.
- PROVIDE GALVANIZED STEEL FILTER PAD FRAMES NO LONGER THAN 24" UNLESS APPROVED BY ENGINEER.
- PROVIDE STAINLESS STEEL LINER, COIL CASING, AND DRAIN PAN.
- ALL MOTORS SHALL BE NON-OVERLOADING TYPE, PREMIUM EFFICIENCY (E+3 RATING), TEFC RATED.
- PROVIDE EC MOTORS.
- UNIT CONFIGURATION (VERTICAL COIL SECTIONS, COIL CONNECTION SIDES, ACCESS DOORS, ETC.) SHALL MATCH BASIS OF DESIGN UNITS PRECISELY.
- PROVIDE AIR HANDLING UNIT WITH TWO CIRCUIT INTERTLACED DX COIL THAT PROVIDES FULL FACE ACTIVATION AT PART LOADS, MINIMUM 4 STAGES TOTAL.
- PROVIDE FACTORY MOUNTED SINGLE POINT POWER PANEL INCLUDING HAND/OFF/AUTO SWITCH, 0-10 VDC SIGNAL INPUT, FAN FAULT TERMINAL, FUSED DISCONNECT, MOTOR CONTROL PANEL, LINE AND LOW VOLTAGE WIRING, INDIVIDUAL FAN MOTOR AND HEATER OVERCURRENT PROTECTION/ISOLATION SWITCH, AND POTENTIOMETER FOR MANUAL CONTROL OVERRIDE. DISCONNECT BY DIV.26. COORDINATE WITH ELECTRICAL CONTRACTOR.
- PROVIDE DDC CONTROLLER FOR 4 STAGES OF COOLING CAPACITY. COORDINATE WITH CONTROLS CONTRACTOR.
- PROVIDE APR VALVE.
- PROVIDE AHU WITH 8" BASE RAIL.

DX ROOFTOP AIR HANDLING UNIT SCHEDULE

IDEA DONNA - FLAGSHIP BUILDING

MARK	UNIT TYPE	SERVES	EXIST. AAOB MN	TOTAL CFM	OUTSIDE AIR CFM	ESP IN WG	FAN TYPE	MAX MOTOR BHP	ELECT. V/PH	SINGLE POINT MCA/MOCP	COND. T (F)	COOLING				TYPE	HEATING		EFFICIENCY		WEIGHT (LBS.)	NOTES	MANUFACTURER MODEL NUMBER
												TOTAL MBH	SENS. MBH	EAT DB/WB (F)	LAT DB/WB (F)		KW	STAGES	EER	IEER			
RTU-1	DX RTU SINGLE ZONE VAV	KITCHEN	RN-020	5,920	800	1.0	DDP	2.314	460/3/60	63/80	100	246,670	150,950	76.1/65.6	50.51/50.45	SINGLE ZONE VAV	30	SCR	11	16.8	6510	ALL	TRANE RE020
RTU-2	DX RTU SINGLE ZONE VAV	CAFETERIA	RN-050	10,440	3,900	1.0	DDP	5.651	460/3/60	162/200	100	556,480	282,310	77.9/70.0	52.97/52.93	SINGLE ZONE VAV	120	SCR	11	17.1	8351	ALL	TRANE RE050
RTU-3	DX RTU MULTI ZONE VAV	1ST FLR	RN-050	10,500	2,800	2.00	DDP	7.403	460/3/60	116/125	100	538,450	296,860	77.1/68.1	51.11/51.06	MULTIZONE VAV WITH EXIST. VAV BOXES	-	-	11.3	17.3	7415	ALL	TRANE RA050
RTU-4	DX RTU MULTI ZONE VAV	2ND FLR	RN-070	14,000	4,200	2.00	DDP	10.181	460/3/60	152/175	100	771,470	408,840	77.3/68.7	50.27/50.31	MULTIZONE VAV WITH EXIST. VAV BOXES	-	-	11.3	18	10298	ALL	TRANE RA070
RTU-5	DX RTU SINGLE ZONE VAV	ROAD TO COLLEGE	RN-018	4,750	1,225	1.0	DDP	1.459	460/3/60	63/80	100	242,820	126,740	77.0/67.9	49.7/49.65	SINGLE ZONE VAV	30	SCR	11	16.8	6510	ALL	TRANE RE020

NOTES:

- MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL". SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND SUBSTITUTION PROCEDURES.
- ESP IS STRICTLY EXTERNAL STATIC PRESSURE AND IS IN ADDITION TO ANY FILTERS, COILS, HEATERS OR OTHER ACCESSORIES INCLUDED WITH THE AIR HANDLING UNIT.
- DOUBLE WALL AHU ON BASE RAIL WITH R9 INSULATION, MIXING BOX FILTER SECTION, DX COIL, AND FAN SECTION WITH HINGED ACCESS DOORS.
- PROVIDE STAINLESS STEEL DRAIN PAN.
- PROVIDE FLAT FILTER MIXING SECTION WITH 2" MERV 13 FILTER, COIL SECTION, AND FAN SECTION, WITH ACCESS DOOR FOR EACH. DO NOT PROVIDE BAROMETRIC RELIEF DAMPERS.
- PROVIDE GALVANIZED FILTER PAD FRAMES/RACKS NO LONGER THAN 24". SEE SPECIFICATIONS.
- ALL MOTORS SHALL BE VFD RATED, NON-OVERLOADING TYPE, PREMIUM EFFICIENCY.
- PROVIDE INTERLACED DX COIL WITH FULL FACE ACTIVATION AT PART LOADS. MAXIMUM 12 FINS PER INCH.
- PROVIDE WITH VARIABLE SPEED LEAD COMPRESSOR MANIFOLDED WITH STAGED COMPRESSORS FOR MODULATING CAPACITY CONTROL.
- CONTROLS NOTES: PROVIDE WITH DISCHARGE AIR CONTROL, MULTIZONE (RTU-3,4) AND SINGLE ZONE (RTU-1,3,2,5) VARIABLE AIR VOLUME, AS INDICATED. COORDINATE CONTROL POINT CONNECTIONS WITH BAS CONTRACTOR. PROVIDE ALL REQUIRED DRIVERS, CONTROLLERS, AND ENGINES.
- PROVIDE DISCHARGE PLENUM WITH BOTTOM OPENING, WITH 2" SPRING ISOLATORS. DISCHARGE VELOCITIES SHALL NOT EXCEED 1500 FPM.
- PROVIDE CONVENIENCE ELECTRICAL OUTLETS AT INDICATED RTUS. DIV. 26 TO PROVIDE WIRING AND POWER FOR THE OUTLETS. COORDINATE WITH ELECTRICAL CONTRACTOR.
- PROVIDE SINGLE POINT POWER FEED FOR CONNECTION TO FAN MOTORS, CONTROLS TRANSFORMERS, WITH FUSED PROTECTION FOR DEDICATED CIRCUITS. SAFETY DISCONNECT BY DIV. 26. COORDINATE WITH ELECTRICAL CONTRACTOR.
- PROVIDE ISC COMPLIANT CURB AND ATTACHMENTS FROM UNIT TO CURB AND CURB TO STRUCTURE. EQUIPMENT OR CURB MANUFACTURER IS RESPONSIBLE FOR PROVIDING ENGINEERED DETAIL ANALYSIS OF:
 - ATTACHMENT OF EQUIPMENT TO CURB.
 - CURB TO STRUCTURE.
 - CURB AND ATTACHMENT HARDWARE STRENGTH.REFER TO STRUCTURAL DRAWINGS FOR ROOF SUBSTRATE DETAILS. EQUIPMENT OR CURB MANUFACTURER IS ALSO RESPONSIBLE FOR PROVIDING ENGINEERED INSTALLATION DRAWINGS FOR ITEMS 1 AND 2 LISTED ABOVE.
- BOTH, THE ENGINEERED ANALYSIS AND THE ENGINEERED INSTALLATION DRAWINGS SHALL BE PERFORMED SPECIFICALLY FOR THIS BUILDING AND PROJECT SITE AND STAMPED AND SEALED BY A TEXAS LICENSED ENGINEER.

EXISTING EXHAUST FAN SCHEDULE

MARK	LOCATION	SERVING	TYPE	ELECTRICAL V-PH-HZ	DRIVE	CFM	INPUT WATTS	MOTOR HP	RPM	E.S.P. IN. H2O	SOUND IN SONES	WEIGHT (LBS)	NOTES	MANUFACTURER	MODEL NUMBER
FLAGSHIP BUILDING															
EF-1	KITCHEN	CUSTODIAN	ROOF MOUNTED	120-1-60	DIRECT	100	-	1/20	1239	0.25	3.5	19.0	ALL	LOREN COOK	70C15DH
EF-2	KITCHEN	RESTROOM	ROOF MOUNTED	120-1-60	DIRECT	100	-	1/20	1239	0.25	3.5	19.0	ALL	LOREN COOK	70C15DH
EF-3	1ST FLOOR	STORAGE	ROOF MOUNTED	120-1-60	DIRECT	200	-	1/8	1308	0.375	3.5	22.0	ALL	LOREN COOK	90C15DL
EF-4	1ST FLOOR	ELECTRICAL	SUSPENDED IN-LINE	120-1-60	DIRECT	200	-	1/6	1087	0.25	3.5	55.0	ALL	LOREN COOK	90SQN12D
EF-5	1ST FLOOR	RESTROOM	CEILING MOUNTED	120-1-60	DIRECT	100	-	7/9W	1062	0.5	3.5	12.0	ALL	LOREN COOK	GC-144
EF-6	1ST FLOOR	RESTROOM	SUSPENDED IN-LINE	120-1-60	DIRECT	1200	-	1/3	957	0.5	3.5	112.0	ALL	LOREN COOK	150SQN10D
EF-7	1ST FLOOR	RESTROOM	SUSPENDED IN-LINE	120-1-60	DIRECT	100	-	1/20	1353	0.25	3.5	39.0	ALL	LOREN COOK	70SQN10D
EF-8	2ND FLOOR	RESTROOM	ROOF MOUNTED	120-1-60	DIRECT	100	-	1/20	1239	0.25	3.5	19.0	ALL	LOREN COOK	70C15DH
EF-9	2ND FLOOR	SCIENCE	ROOF MOUNTED	120-1-60	DIRECT	800	-	1/4	1040	0.37	3.5	31.0	ALL	LOREN COOK	120C15D
EF-10	2ND FLOOR	RESTROOM	SUSPENDED IN-LINE	120-1-60	DIRECT	1000	-	1/6	1027	0.375	3.5	98.0	ALL	LOREN COOK	135SQN10D
EF-11	1ST FLOOR	RESTROOM ADD	ROOF MOUNTED	120-1-60	DIRECT	300	-	1/8	1649	0.5	3.5	22.0	ALL	LOREN COOK	90C15DL
EF-12	2ND FLOOR	ELECTRICAL	SUSPENDED IN-LINE	120-1-60	DIRECT	200	-	1/6	1087	0.25	3.5	55.0	ALL	LOREN COOK	90SQN12D
KEF-1	KITCHEN	KITCHEN HOODS	ROOF MOUNTED	120-1-60	BELT	9900	-	7 1/2	1080	1.5	3.5	294.0	ALL	LOREN COOK	365 ACRU-XP
KSF-1	KITCHEN	KITCHEN HOODS	ROOF MOUNTED	120-1-60	BELT	7920	-	5	729	1	3.5	589.0	ALL	LOREN COOK	200KSP-B
ACF-1	KITCHEN	KITCHEN HOODS	AIR CURTAIN	120-1-60	DIRECT	2899	-	3/4	-	-	3.5	90.0	ALL	POWERED AIRE	BCT 1-36
11-12TH BUILDING															
EF-1	RESTROOM	RR & JANITOR	SUSPENDED IN-LINE	120-1-60	DIRECT	700	353	-	-	0.35	3.5	36.0	ALL	LOREN COOK	GN-740
EF-2	SCI. LAB A107	SCI. LABS & PREP	SUSPENDED IN-LINE	120-1-60	DIRECT	900	307	-	-	0.35	3.7	74.0	ALL	LOREN COOK	GN-842
EF-3	SCI. LAB A105	CABINETS & PREP	SUSPENDED IN-LINE	120-1-60	DIRECT	100	110	-	-	0.8	3.4	16.0	ALL	LOREN COOK	GN-164
EF-4	SCI. LAB A105	SCI. LAB A105	SUSPENDED IN-LINE	120-1-60	DIRECT	700 / 2120	-	3/4	-	0.3 / 1.0	15.8	150.0	ALL	LOREN COOK	150SQN-B
EF-5	SCI. LAB A107	SCI. LAB A107	SUSPENDED IN-LINE	120-1-60	DIRECT	700 / 2120	-	3/4	-	0.3 / 1.0	15.8	150.0	ALL	LOREN COOK	150SQN-B

NOTES:

- EXISTING EXHAUST FAN SCHEDULE SHOWN FOR REFERENCE PURPOSES ONLY.

EXISTING MINI-SPLIT CONDENSER SCHEDULE

MARK	SERVING	NOMINAL CAPACITY (TONS)	COND DB	ELECTRICAL				SEER ARI	COMPRESSOR DATA		WEIGHT (LBS)	NOTES	MANUFACTURER	MODEL NUMBER
				V-PH-HZ	FLA	MCA	MOCP		REFRIG.	# OF COMPRS				
FLAGSHIP BUILDING														
DSCU-1	DS-1	3	95	230-1-60	21.3	22.8	40	-	R-407C	1	241	ALL	LIEBERT	PFH037A
DSCU-2	DS-2	2	95	230-1-60	15.4	16.4	30	-	R-407C	1	241	ALL	LIEBERT	PFH027A
DSCU-3	DS-3	2	95	230-1-60	15	16.4	30	-	R-407C	1	241	ALL	LIEBERT	PFH027A
11-12TH BUILDING														
ACCU-3	CC-1	1	100	208-1-60	5.3	6.4	15	13	R-410A	1	150	ALL	EMI AMERICA SERIES	STCA2

NOTES:

- EXISTING MINI-SPLIT CONDENSER UNIT SCHEDULE SHOWN FOR REFERENCE PURPOSES ONLY.

AIR COOLED CONDENSING UNIT SCHEDULE

11-12TH BUILDING														
MARK	SERVING	EXISTING MFR/MODEL	TOTAL BTUH	COND DB	ELECTRICAL V-PH-HZ	EER / IEER AT ARI	STEPS OF CAPACITY	FANS HP	(CIRCUIT)		WEIGHT (LBS.)	NOTES	MANUFACTURER	MODEL NUMBER
									MCA	MOCP				
ACCU-1	AHU-1	TRANE / TTA180B40SFA	180,000	100	460-3-60	11.2	2	1	33	40	715	ALL	TRANE	TTA180
ACCU-2	AHU-2	TRANE / RAUJC404BC	480,000	100	460-3-60	11.1	4	1	99	110	3190	ALL	TRANE	RAUK40

NOTES:

- MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL". SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND SUBSTITUTION PROCEDURES.
- PROVIDE DUAL REFRIGERATION CIRCUIT CONDENSING UNITS, WITH SCHEDULED NUMBER OF COMPRESSORS.
- EER SHALL EXCEED IECC MINIMUM EFFICIENCY AT DESIGN CONDITIONS.
- PROVIDE LOUVERED HAIL GUARD, LOW AMBIENT KIT, SIGHT GLASS, SERVICE VALVES, FILTER DRYER, SOLENOID VALVES, TXVS, ANTI-SHORT CYCLE TIMER.
- PROVIDE FREEZE/STAT/DEFROST CONTROLLER TO PROTECT COMPRESSOR WHEN ICE BUILD-UP IS DETECTED IN THE EVAPORATOR COIL.
- PROVIDE CONDENSER COIL COATING AS PER SPECIFICATIONS.
- SAFETY DISCONNECT TO BE PROVIDED BY DIV. 26.
- INSULATE REFRIGERANT LINES AS PER SPECIFICATIONS. PROVIDE UV RESISTANT PAINTED JACKETING AROUND INSULATION FOR ALL EXTERIOR EXPOSED LINES.
- MOUNT ON 4" CONCRETE HOUSEKEEPING PAD AND MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES. BOLT CONDENSING UNIT DOWN TO CONCRETE PAD.
- PROVIDE FACTORY INSTALLED APR VALVE. PROVIDE THERMOSTAT TO PROVIDE 2 STAGES OF MODULATION PER CONDENSING UNIT.

VAV BOX SCHEDULE

MARK	SERVING	CFM	MIN ELEC HEAT KW	ELECTRICAL V-PH-HZ	ELECTRIC HEAT STEPS	UNIT PD (IN WG)	MIN COOLING FLOW(%)	TITUS MODEL SERIES	MODEL SIZE	NOTES
11-12TH BUILDING										
SERVED BY AHU-1										
VAV1-1	SEE PLANS	1925	11.0	480-3-60	3	0.14	30%	DESV	14	ALL
VAV1-2	SEE PLANS	1925	11.0	480-3-60	3	0.14	30%	DESV	14	ALL
SERVED BY AHU-2										
VAV2-1	SEE PLANS	1450	8.0	480-3-60	3	0.14	30%	DESV	12	ALL
VAV2-2	SEE PLANS	900	5.0	480-3-60	2	0.11	30%	DESV	10	ALL
VAV2-3	SEE PLANS	1100	6.0	480-3-60	3	0.16	30%	DESV	10	ALL
VAV2-4	SEE PLANS	1075	6.0	480-3-60	3	0.16	30%	DESV	10	ALL
VAV2-5	SEE PLANS	850	5.0	480-3-60	2	0.10	30%	DESV	10	ALL
VAV2-6	SEE PLANS	950	5.5	480-3-60	2	0.12	30%	DESV	10	ALL
VAV2-7	SEE PLANS	1000	5.5	480-3-60	2	0.14	30%	DESV	10	ALL
VAV2-8	SEE PLANS	1200	7.0	480-3-60	2	0.10	30%	DESV	12	ALL
VAV2-9	SEE PLANS	625	3.5	480-3-60	2	0.03	30%	DESV	8	ALL
FLAGSHIP BUILDING										
SERVED BY RTU-3										
SD-3-10	SEE PLANS	200	1.0	277-1-60	1	0.02	30%	DESV	5	ALL
SD-3-14	SEE PLANS	200	1.0	277-1-60	1	0.02	30%	DESV	5	ALL
SD-3-15	SEE PLANS	200	1.0	277-1-60	1	0.02	30%	DESV	5	ALL
SD-3-18	SEE PLANS	400	2.0	277-1-60	2	0.13	30%	DESV	6	ALL

EQUIPMENT CONNECTION SCHEDULE:

DESIGN	NEW MCA	EXISTING MOCP	NEW MOCP	VOLTAGE	EXISTING MEANS OF DISCONNECT	NEW MEANS OF DISCONNECT	EXISTING BRANCH CIRCUIT	NEW BRANCH CIRCUIT 60°C (COPPER) ≤ 100A (MOCP) 75°C (COPPER) > 100A (MOCP)	POWER SOURCE
FLAGSHIP BUILDING									
RTU-1	63	70	2) 80	480V/3-PHASE	REMOVE EXISTING	100A, 3PNF, 600V, NEMA 3R	1" - 3#4 & #6G	RETAIN EXISTING	DPA
RTU-2	162	200	1) 200	480V/3-PHASE	REMOVE EXISTING	200A, 3PNF, 600V, NEMA 3R	2" - 3#3/0 & #6G	RETAIN EXISTING	DPA
RTU-3	116	*) 175	125	480V/3-PHASE	REMOVE EXISTING	200A, 3PNF, 600V, NEMA 3R	1.25" - 3#1/0 & #6G	RETAIN EXISTING	DPA
RTU-4	152	*) 125	175	480V/3-PHASE	REMOVE EXISTING	200A, 3PNF, 600V, NEMA 3R	2" - 3#3/0 & #6G	RETAIN EXISTING	DPA
RTU-5	63	70	2) 80	480V/3-PHASE	REMOVE EXISTING	100A, 3PNF, 600V, NEMA 3R	1" - 3#4 & #6G	RETAIN EXISTING	DPA
SD-3-10	14.4	20	1) 20	277V/1-PHASE	REMOVE EXISTING	3) THERMAL SWITCH	1/2"-2#12& #12G	RETAIN EXISTING	1HA
SD-3-14	14.4	20	1) 20	277V/1-PHASE	REMOVE EXISTING	3) THERMAL SWITCH	1/2"-2#12& #12G	RETAIN EXISTING	1HA
SD-3-15	14.4	20	1) 20	277V/1-PHASE	REMOVE EXISTING	3) THERMAL SWITCH	1/2"-2#12& #12G	RETAIN EXISTING	1HA
SD-3-18	4.16	-	4) 20	277V/1-PHASE	-	3) THERMAL SWITCH	1/2"-2#12& #12G	1/2" - 2#12G	1HA
11TH-12TH BUILDING									
ACCU-1	33	45	2) 40	480V/3-PHASE	REMOVE EXISTING.	CIRCUIT BREAKER WITHIN SIGHT.	3/4" - 3#8 & #10G	RETAIN EXISTING	DPD
ACCU-2	99	100	2) 110	480V/3-PHASE	REMOVE EXISTING.	CIRCUIT BREAKER WITHIN SIGHT.	REMOVE EXISTING	1.25" - 3#2 & #6G	DPD
AHU-1	8.5	20	2) 15	480V/3-PHASE	REMOVE EXISTING.	30A, 3PNF, 600V, NEMA 1	3/4" - 3#10 & #10G	RETAIN EXISTING	DPD
AHU-2	13.82	30	2) 15	480V/3-PHASE	REMOVE EXISTING.	30A, 3PNF, 600V, NEMA 1	3/4" - 3#10 & #10G	RETAIN EXISTING	DPD
VAV1-1,2, VAV2-1,8	59.8	60	1) 60	480V/3-PHASE	REMOVE EXISTING.	30A, 3PNF, 600V, NEMA 1, SIN (EACH)	1" - 4#6 & #10G (EACH)	RETAIN EXISTING	DPD
VAV2-2,3,4,5,6,7,9	57.1	60	1) 60	480V/3-PHASE	REMOVE EXISTING.	30A, 3PNF, 600V, NEMA 1, SIN (EACH)	1" - 4#6 & #10G (EACH)	RETAIN EXISTING	DPD

GENERAL NOTES:
A) LOCATE EQUIPMENT MEANS OF DISCONNECT WITHIN EQUIPMENT SIGHT. DO NOT INSTALL BELOW DUCTWORK OR PLUMBING LINES.
B) PROVIDE NEW BRANCH CONNECTION FROM DISCONNECT TO EQUIPMENT. TYPICAL FOR ALL NEW HVAC EQUIPMENT.

NOTES:
1) RETAIN AND REUSE EXISTING CIRCUIT BREAKER
2) REMOVE EXISTING CIRCUIT BREAKER AND PROVIDE NEW TO MATCH NEW MOCP. PROVIDE ALL UL LISTED UNIT FROM EXISTING MANUFACTURER. MATCH EXISTING KAIC.
3) PROVIDE SQUARE "D" CLASS 2510 WITHOUT OVERLOADS.
4) CONNECT TO AN EXISTING 20A/1P SPARE BREAKER.

*) THE EXISTING RTU-3 AND RTU-4 TAGS IN PANEL DPA COULD POTENTIALLY BE REVERSED. THE BREAKER LOCATED NEXT TO EACH TAG DOES NOT MATCH THE MAXIMUM OVER CURRENT PROTECTION (MOCP) SHOWN ON THE EXISTING EQUIPMENT NAMEPLATE.

REQUIRED CONNECTIONS:
• RTU-3: 1.25" - 3#1/0 & #6G CONNECTED TO A 125A, 3-POLE BREAKER.
• RTU-4: 2" - 3#3/0 & #6G CONNECTED TO A 175A, 3-POLE BREAKER.

FIELD INSTRUCTION
1. TRACE BOTH CIRCUITS FROM PANEL DPA TO RTU-3 AND RTU-4. DO NOT IDENTIFY THE CIRCUITS USING THE EXISTING PANEL TAGS ONLY.
2. VERIFY WHICH BREAKER AND SET OF CONDUCTORS SERVE EACH UNIT.
3. IF THE BREAKERS AND CONDUCTORS ALREADY MATCH THE REQUIRED CONNECTIONS LISTED ABOVE, CORRECT THE PANEL TAGS ONLY.
4. IF THE EXISTING BREAKERS AND/OR CONDUCTORS DO NOT MATCH THE REQUIRED CONNECTIONS, SWAP THE EXISTING 125A AND 175A BREAKERS, AS NEEDED, AND REROUTE THE EXISTING CONDUCTORS AS REQUIRED. THE FINAL CONNECTIONS SHALL MATCH THE MCA AND MOCP REQUIREMENTS OF NEW RTU-3 AND RTU-4. REFER TO THE EQUIPMENT CONNECTION SCHEDULE.

5. UPDATE THE PANEL DIRECTORY AND BREAKER TAGS AFTER ALL CONNECTIONS HAVE BEEN VERIFIED.

SWITCHBOARD "DPA" (EXISTING): EATON POW-R-LINE, 1200A, 480Y/277V, 3Ø, 4W, 65KAIC.
PANELBOARD "DPD" (EXISTING): SQUARE "D", 400A, 480Y/277V, 3Ø, 4W, 35KAIC.
PANELBOARD "1HA" (EXISTING): EATON PRL3A, 250A, 480Y/277V, 3Ø, 4W, 35KAIC.



01 EXISTING FIRE ALARM CONTROL PANEL IMAGE
SCALE : NOT TO SCALE.



02 PANELBOARD "DPD" IMAGE
SCALE : NOT TO SCALE.



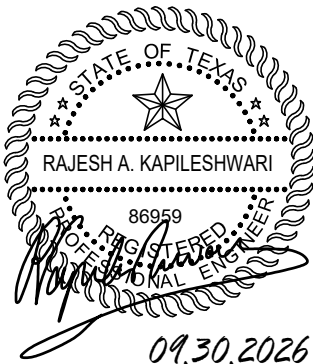
03 SWITCHBOARD "DPA" IMAGE
SCALE : NOT TO SCALE.



04 PANELBOARD "1HA" IMAGE
SCALE : NOT TO SCALE.

NO: REVISION: BY:

COPY NO:
CSP # 41-DMCP-0826



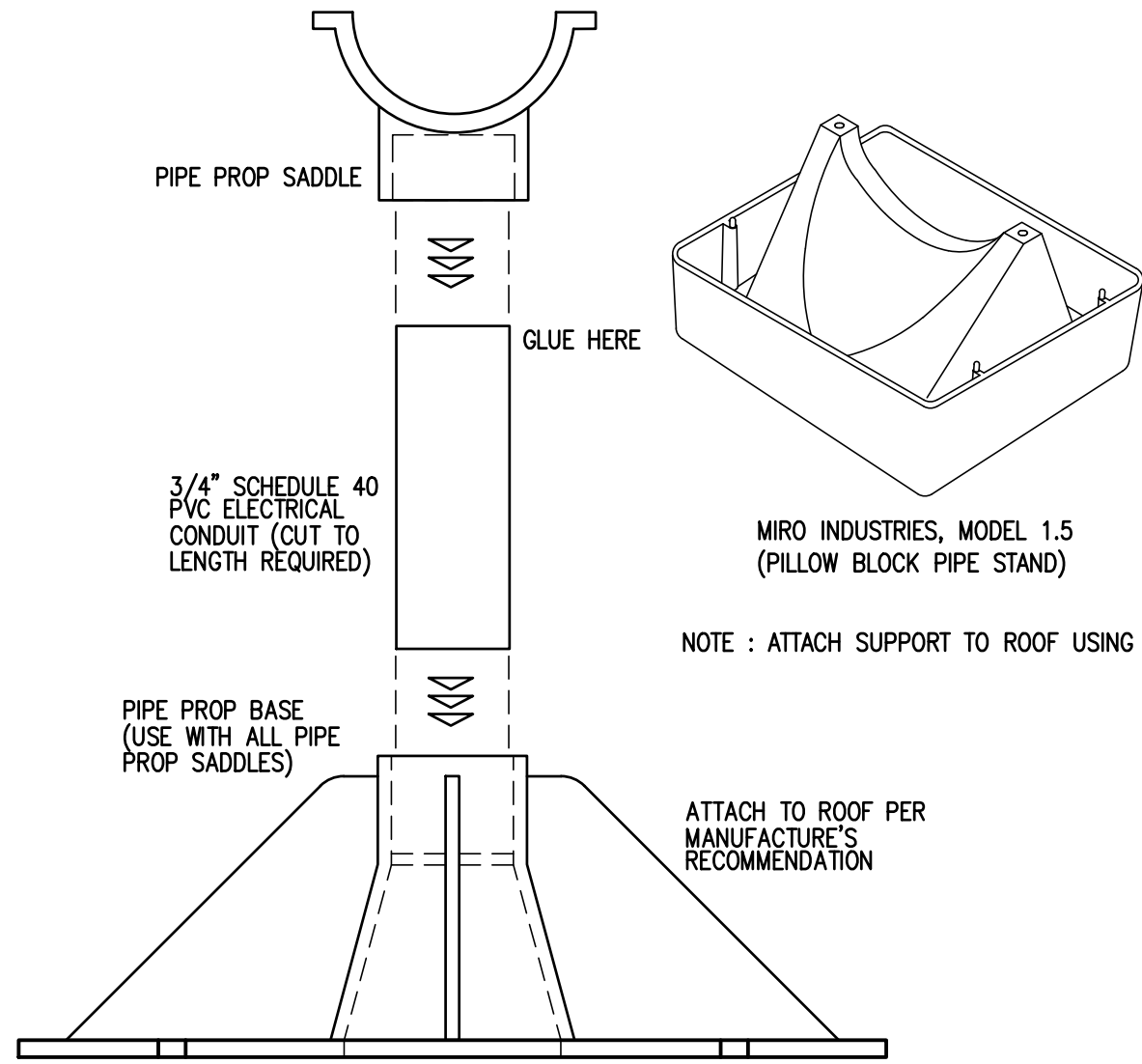
TEXAS

IDEA DONNA MECHANICAL UPGRADES

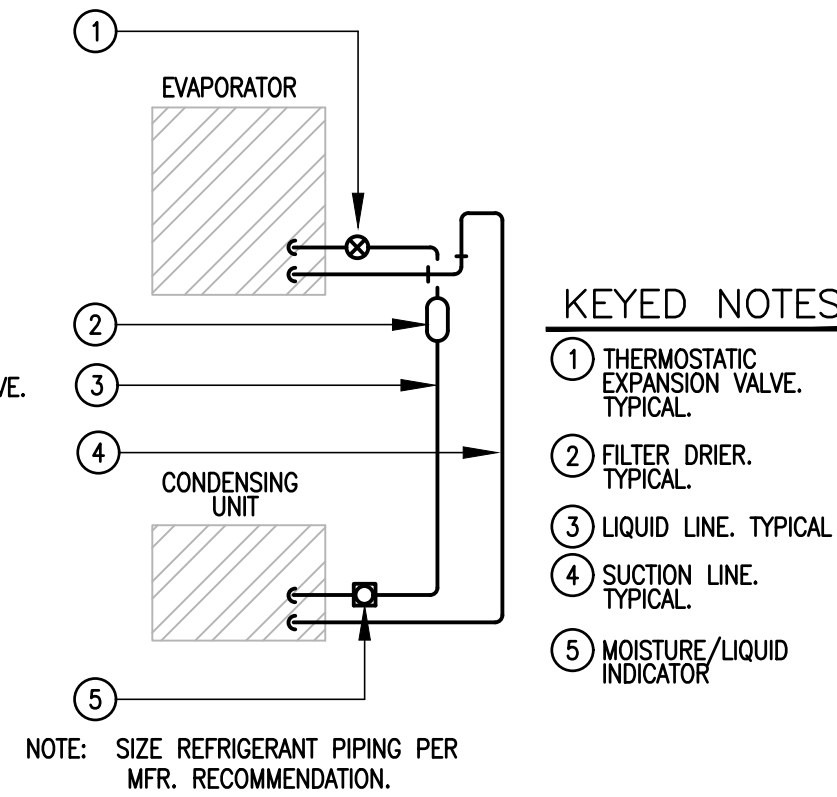
DONNA



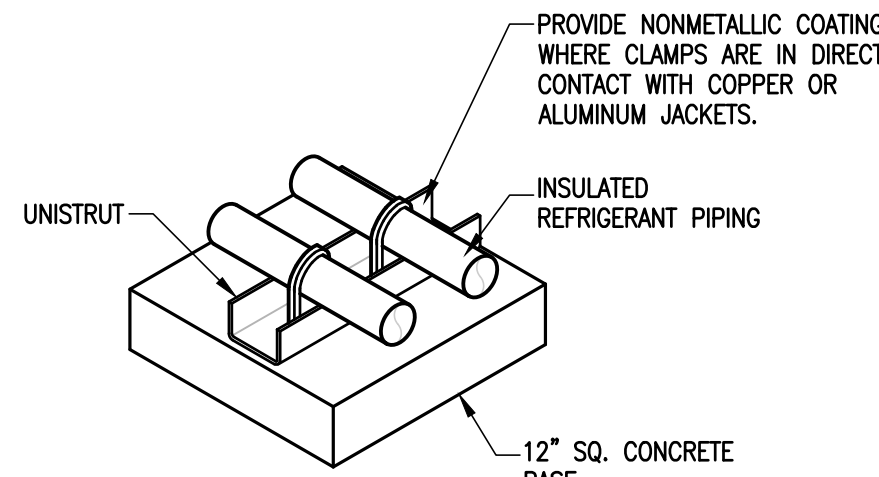
DATE: SEPTEMBER 30, 2026
CHECKED BY: B. BURKE
DRAWN BY: J. R. / B.T.
PROJECT NO.: 26v21
CAD FILE:
SHEET:
ME4.02



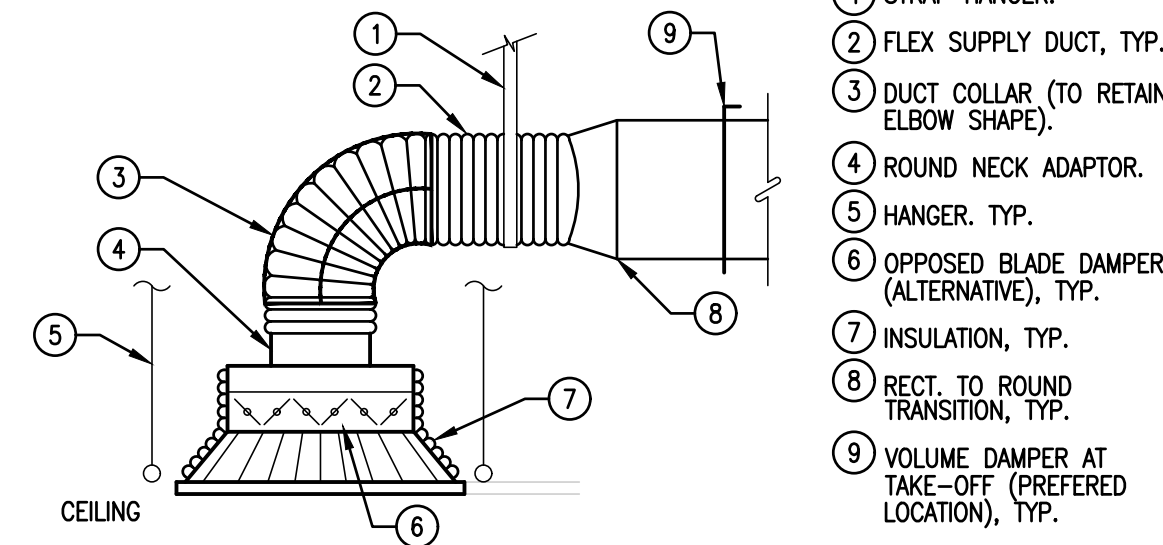
01 CONDENSATE PIPE SUPPORT DETAIL
SCALE: NOT TO SCALE



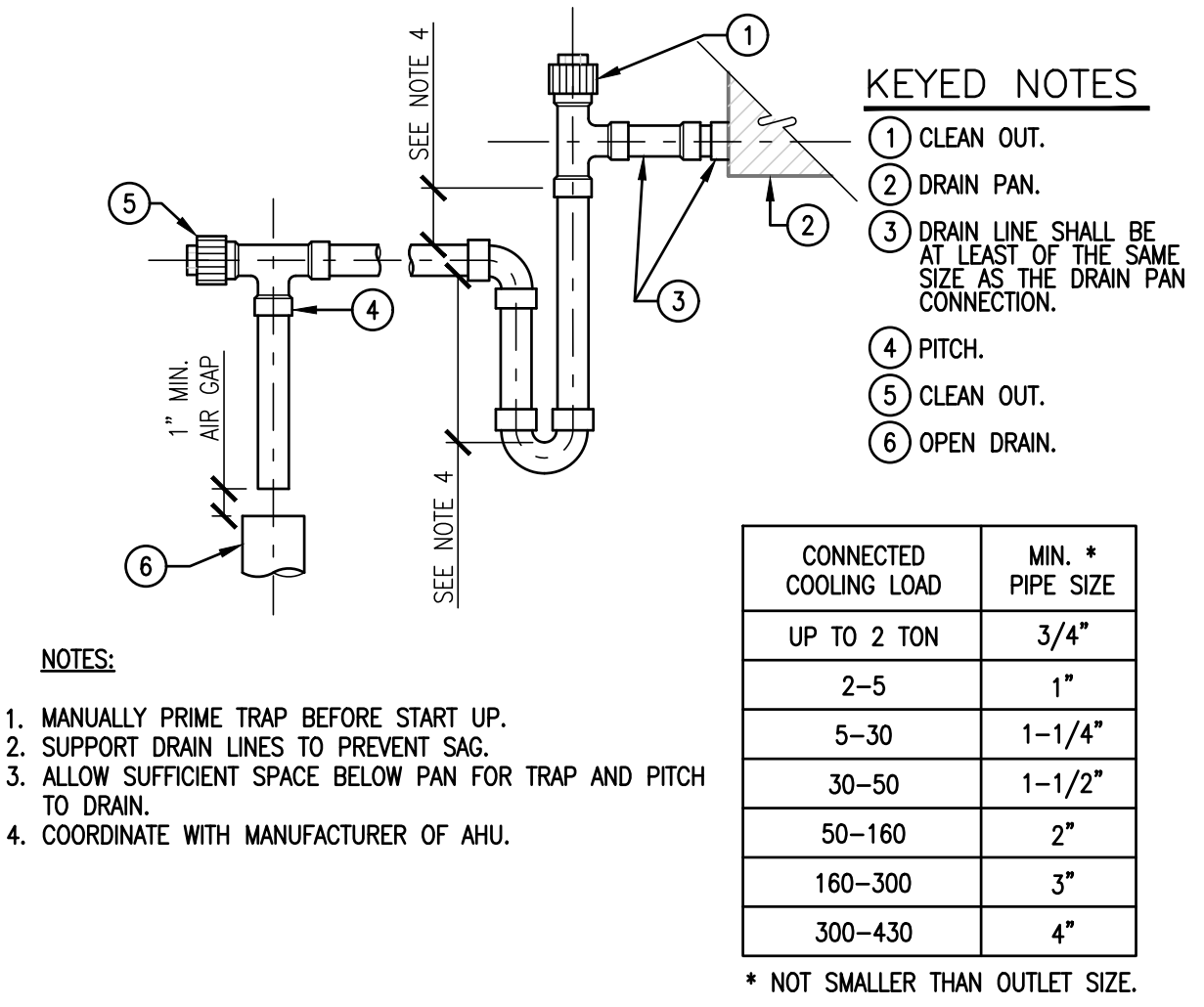
02 REFRIGERANT PIPING DIAGRAM
SCALE: NOT TO SCALE



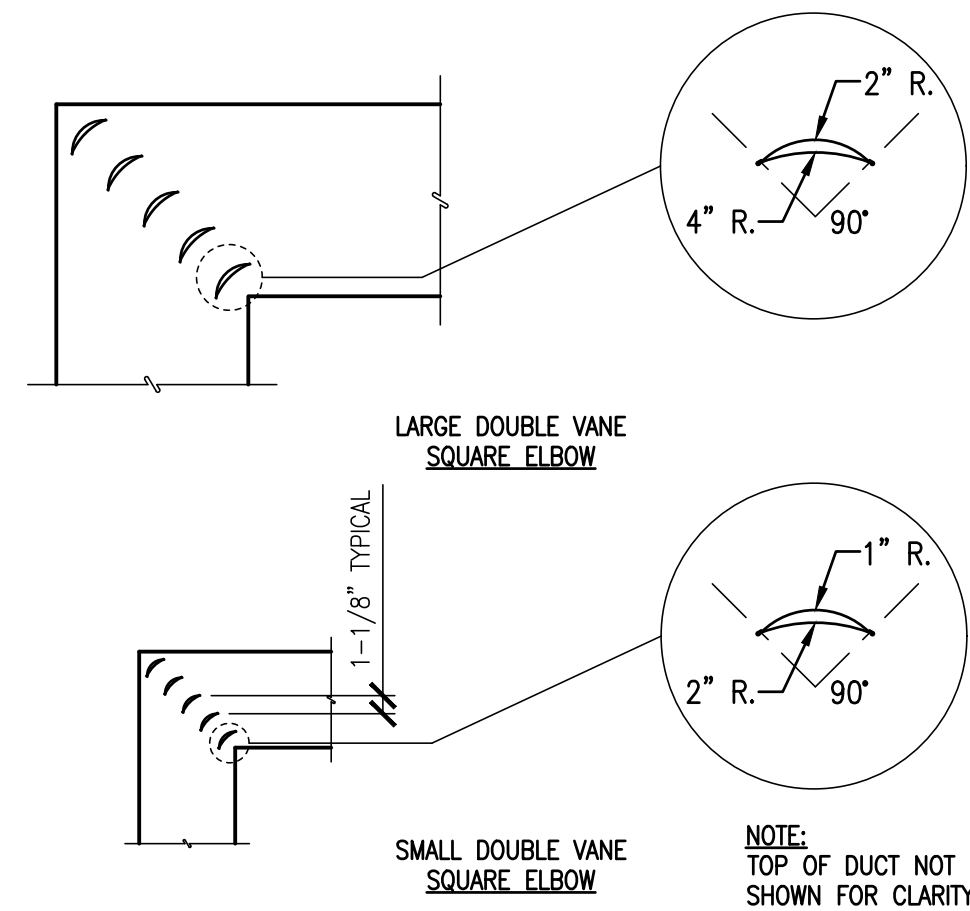
03 REFRIGERANT PIPING SUPPORT DETAILS
SCALE: NOT TO SCALE



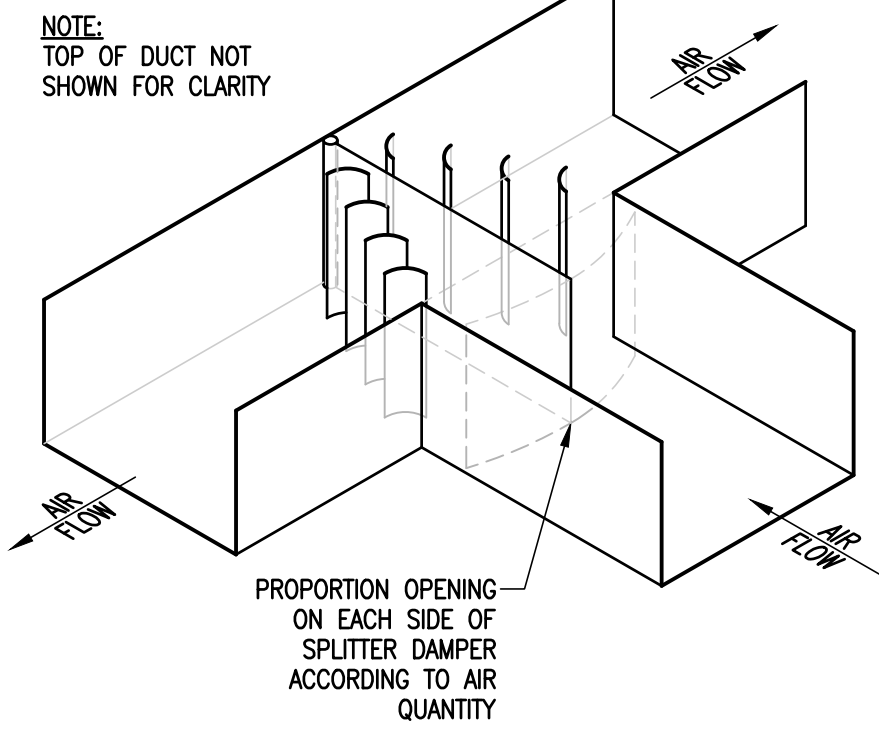
04 CEILING DIFFUSER SUPPORT DETAIL
SCALE: NOT TO SCALE



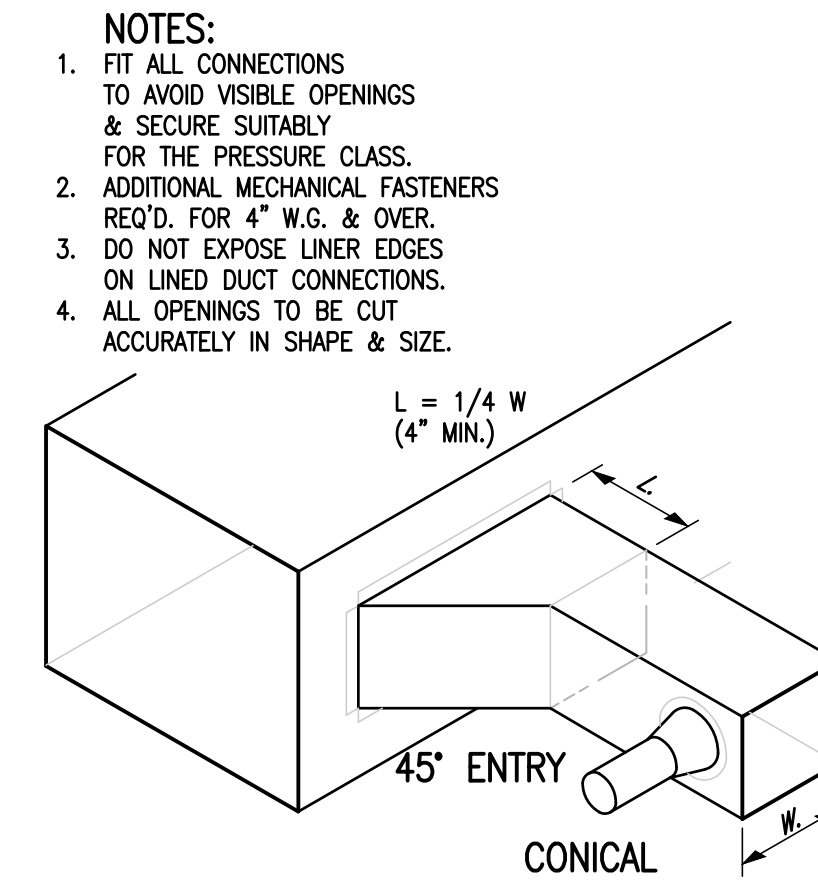
05 CONDENSATE DRAIN TRAP PIPE DETAIL
SCALE: NOT TO SCALE



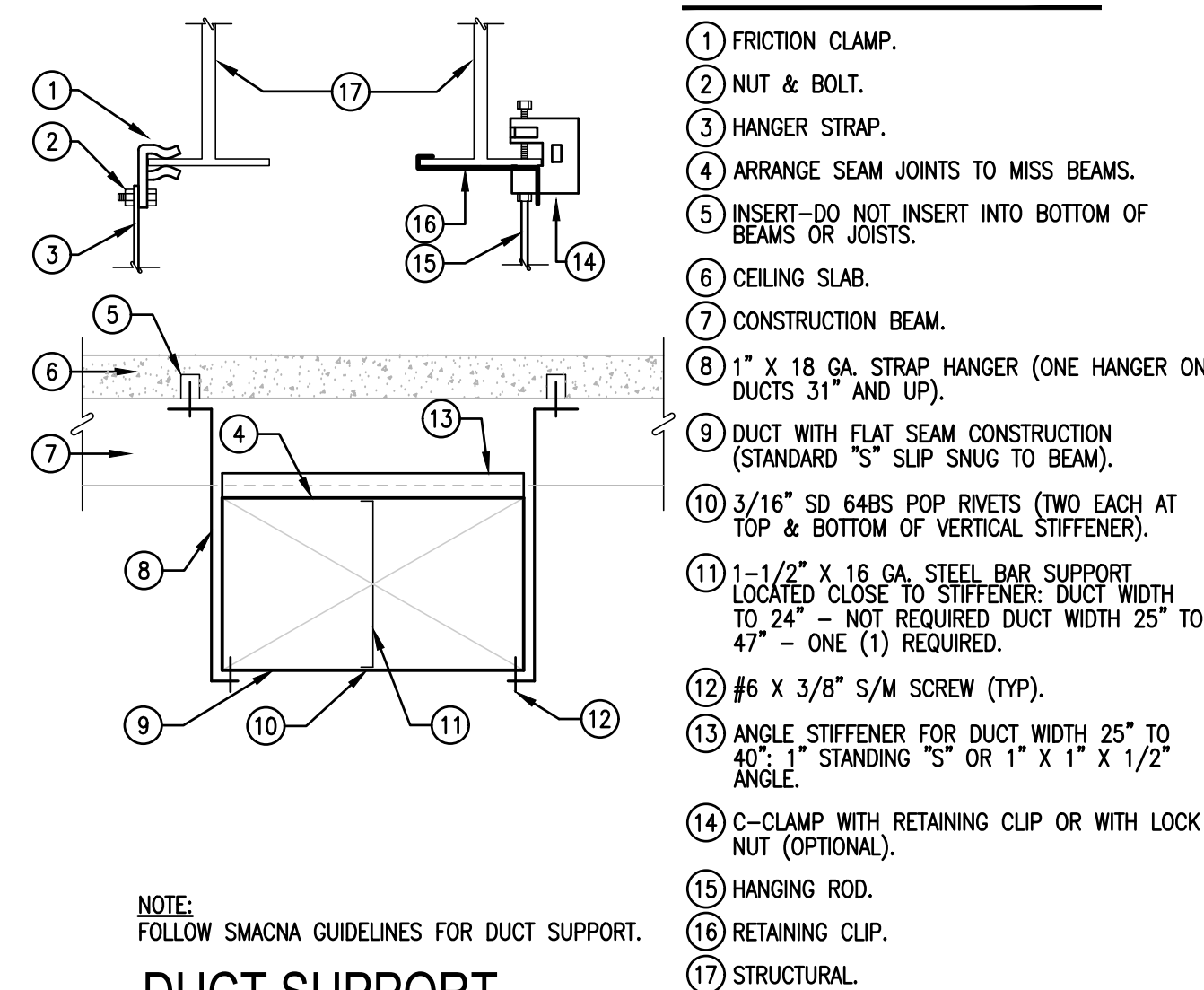
06 TYPICAL VANED DUCT ELBOWS
SCALE: NOT TO SCALE



07 TYPICAL SPLITTER DAMPER
SCALE: NOT TO SCALE

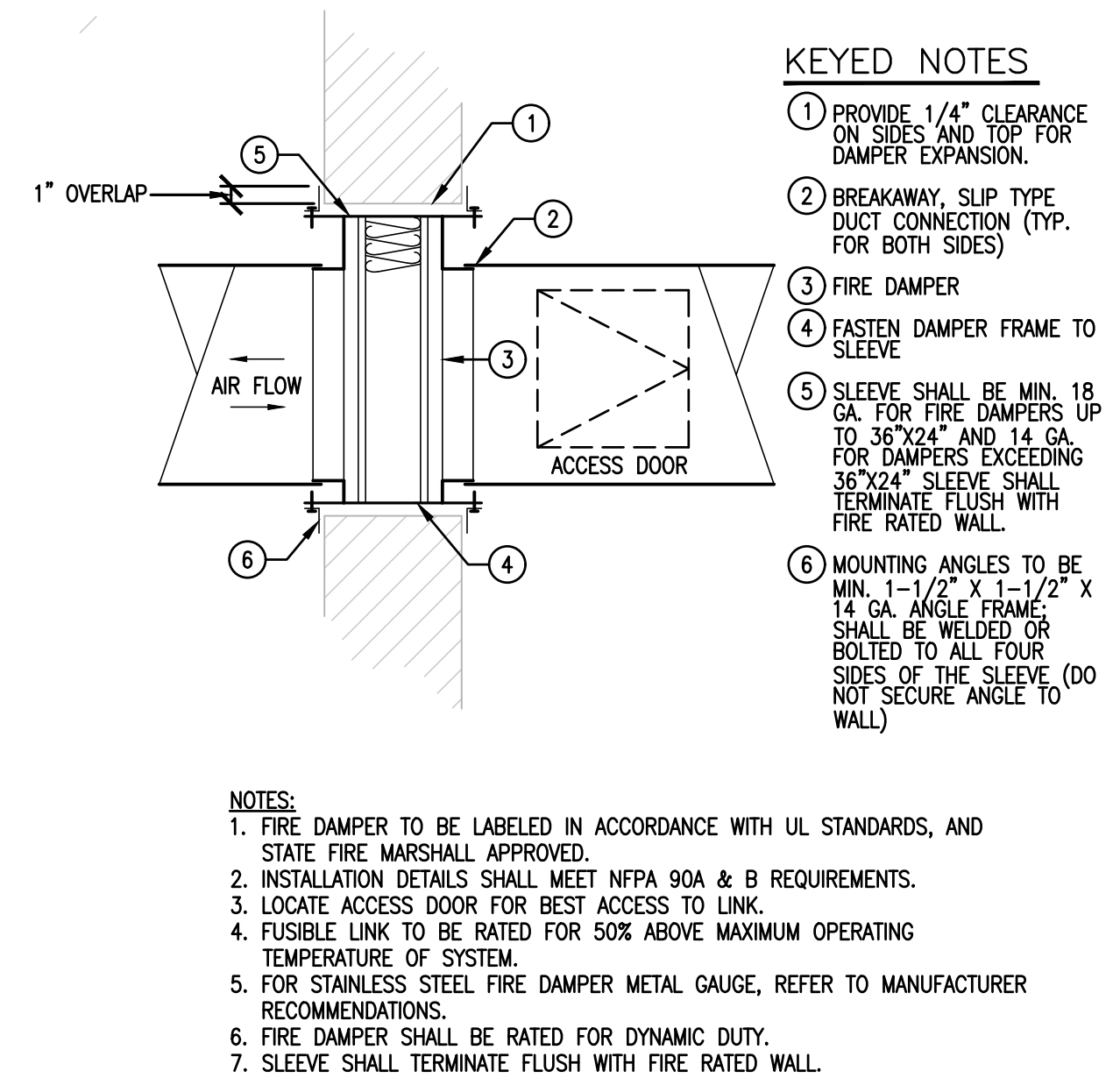


08 BRANCH CONNECTION DETAILS
SCALE: NOT TO SCALE



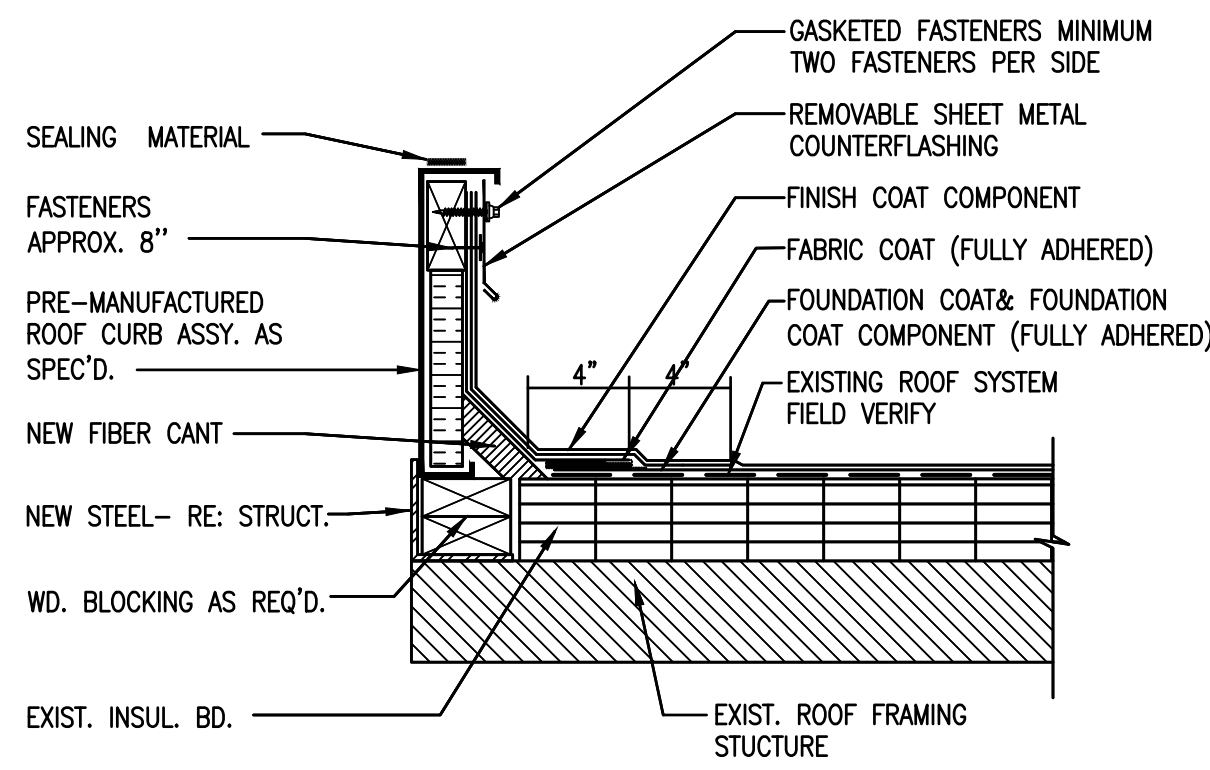
NOTE:
FOLLOW SMACNA GUIDELINES FOR DUCT SUPPORT.

09 DUCT SUPPORT
SCALE: NOT TO SCALE

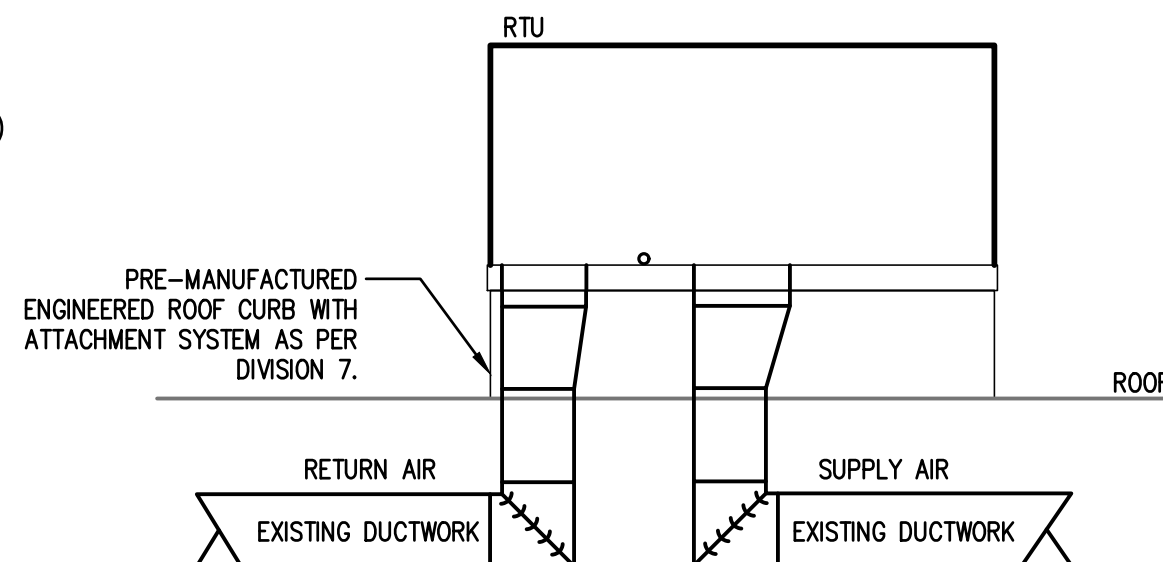


NOTES:
1. FIRE DAMPER TO BE LABELED IN ACCORDANCE WITH UL STANDARDS, AND STATE FIRE MARSHALL APPROVED.
2. INSTALLATION DETAILS SHALL MEET NFPA 90A & B REQUIREMENTS.
3. LOCATE ACCESS DOOR FOR BEST ACCESS TO LINK.
4. FUSIBLE LINK TO BE RATED FOR 50% ABOVE MAXIMUM OPERATING TEMPERATURE OF SYSTEM.
5. FOR STAINLESS STEEL FIRE DAMPER METAL GAUGE, REFER TO MANUFACTURER RECOMMENDATIONS.
6. FIRE DAMPER SHALL BE RATED FOR DYNAMIC DUTY.
7. SLEEVE SHALL TERMINATE FLUSH WITH FIRE RATED WALL.

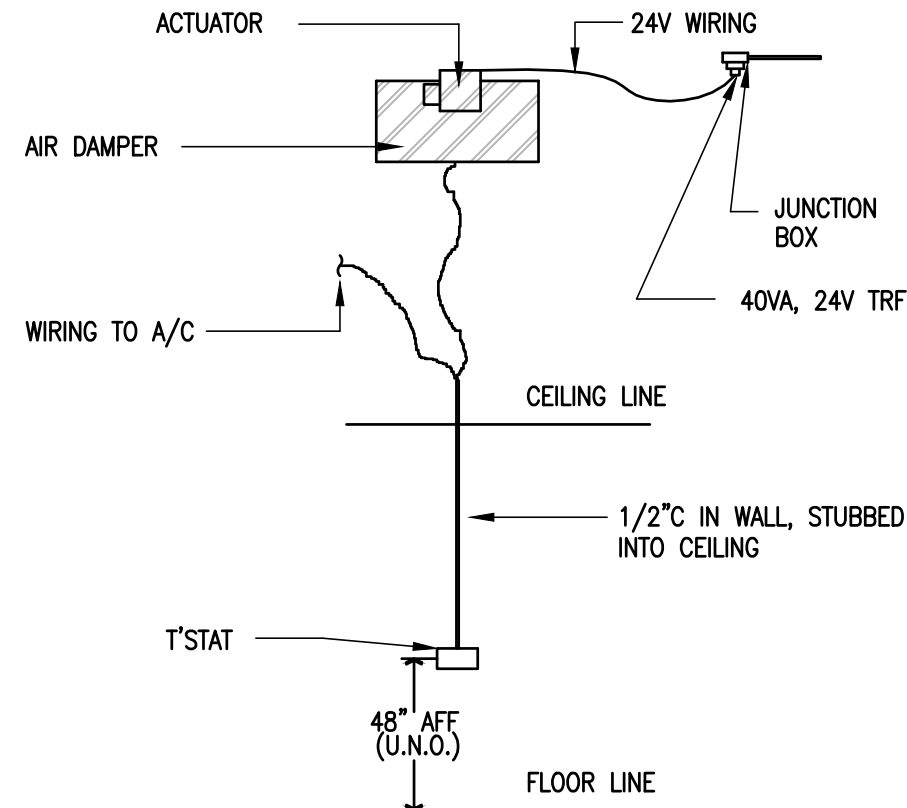
10 FIRE DAMPER WITH ACCESS PANEL DETAIL
SCALE: NOT TO SCALE



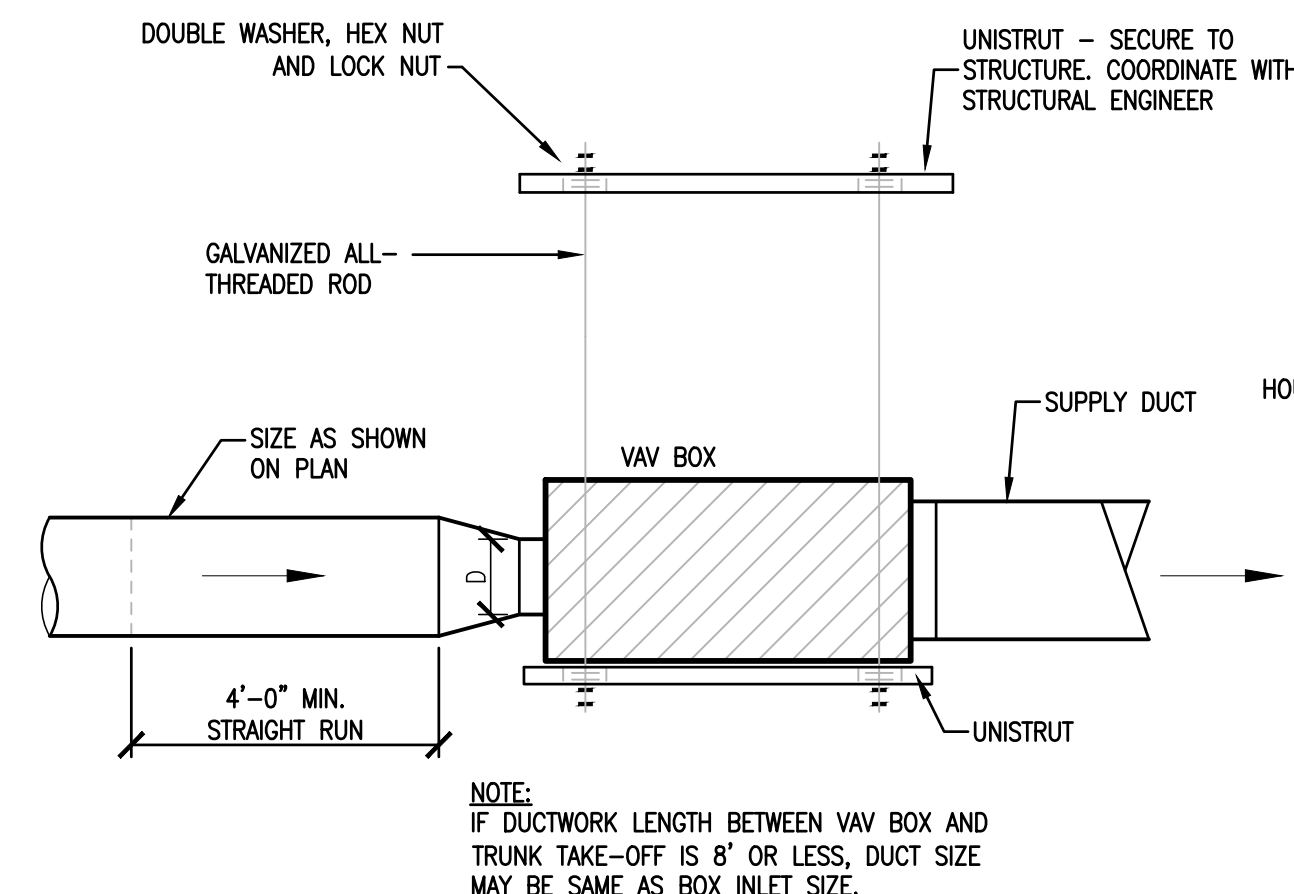
11 ROOF FLASHING DETAIL
SCALE: NOT TO SCALE



12 ROOFTOP UNIT DETAIL
SCALE: NOT TO SCALE

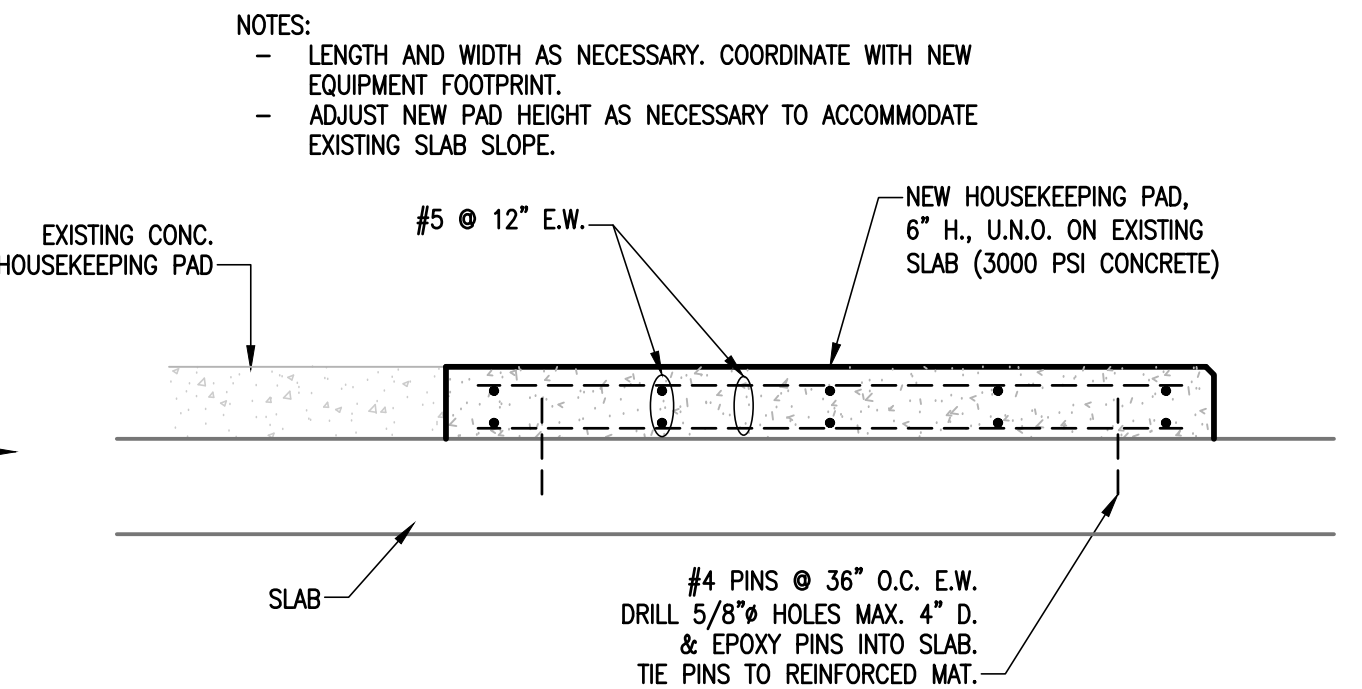


13 TYPICAL VAV SYSTEM DETAIL
SCALE: NOT TO SCALE



NOTE:
IF DUCTWORK LENGTH BETWEEN VAV BOX AND TRUNK TAKE-OFF IS 8' OR LESS, DUCT SIZE MAY BE SAME AS BOX INLET SIZE.

14 TYPICAL VAV BOX DUCT CONNECTION DETAIL
SCALE: NOT TO SCALE



15 HOUSEKEEPING PAD EXTENSION DETAIL
SCALE: NOT TO SCALE

NO: REVISION: BY:

COPY NO:

CSP # 41-DMCP-0826



TEXAS

IDEA DONNA MECHANICAL UPGRADES

DONNA



1126 SOUTH COMMERCE ST.
HARLINGEN, TX
PHONE: 361-230-3425
TEXAS REGISTERED
ENGINEERING FIRM
F-15988

DATE: SEPTEMBER 30, 2026

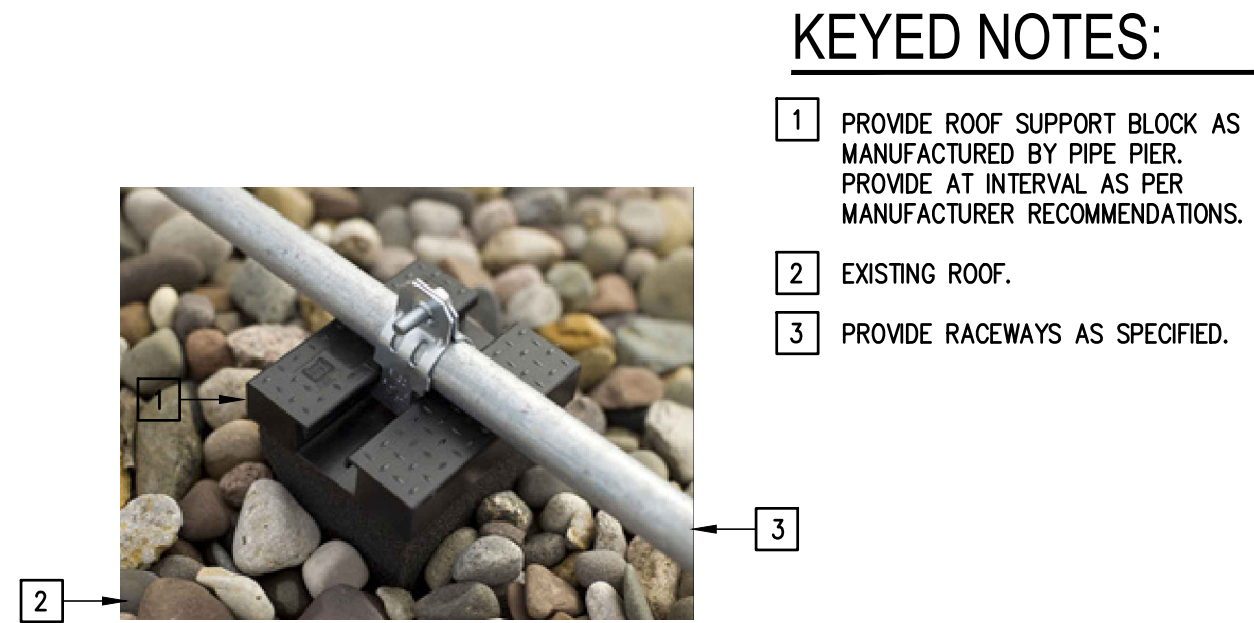
CHECKED BY: B. BURKE

DRAWN BY: J. R. / B.T.

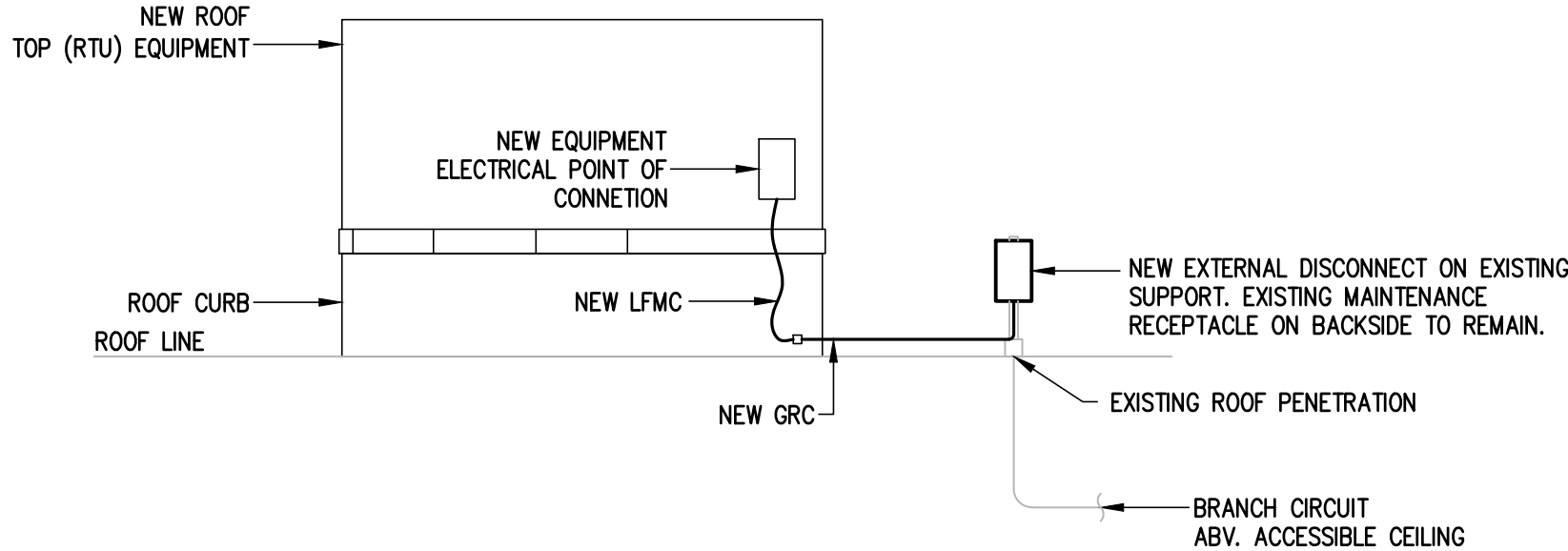
PROJECT NO.: 26v21

CAD FILE:
SHEET:

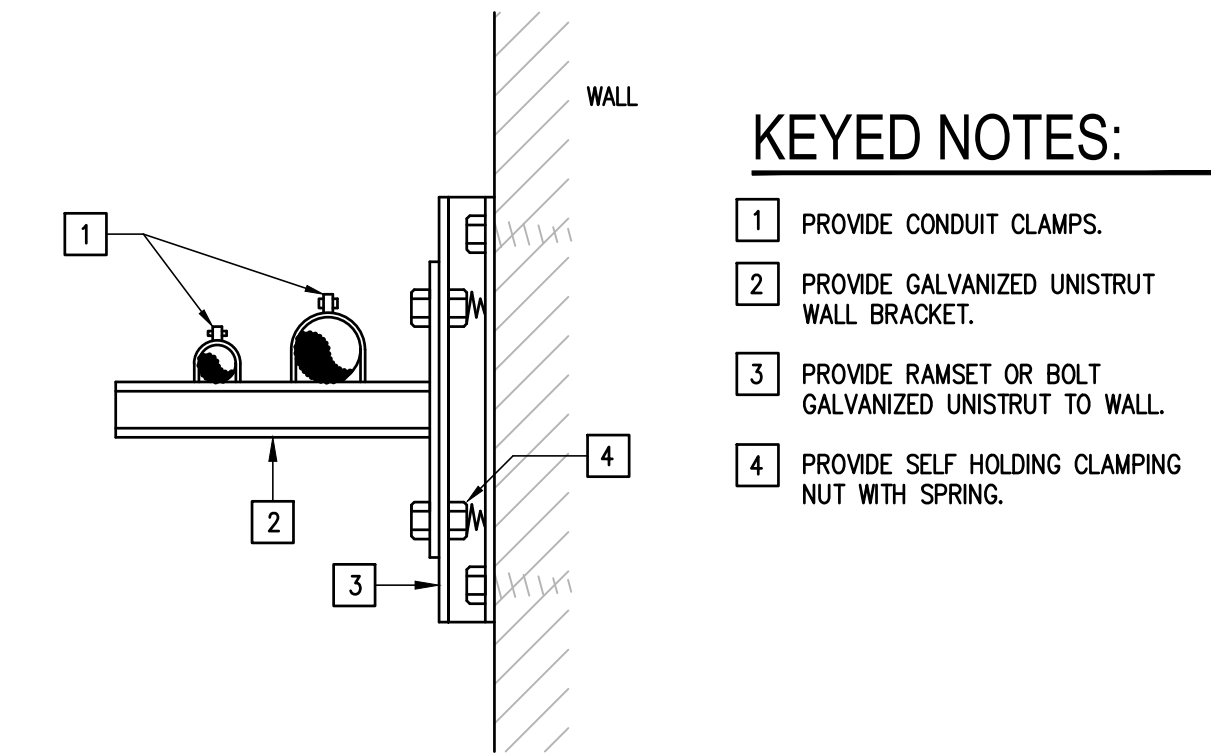
ME5.01



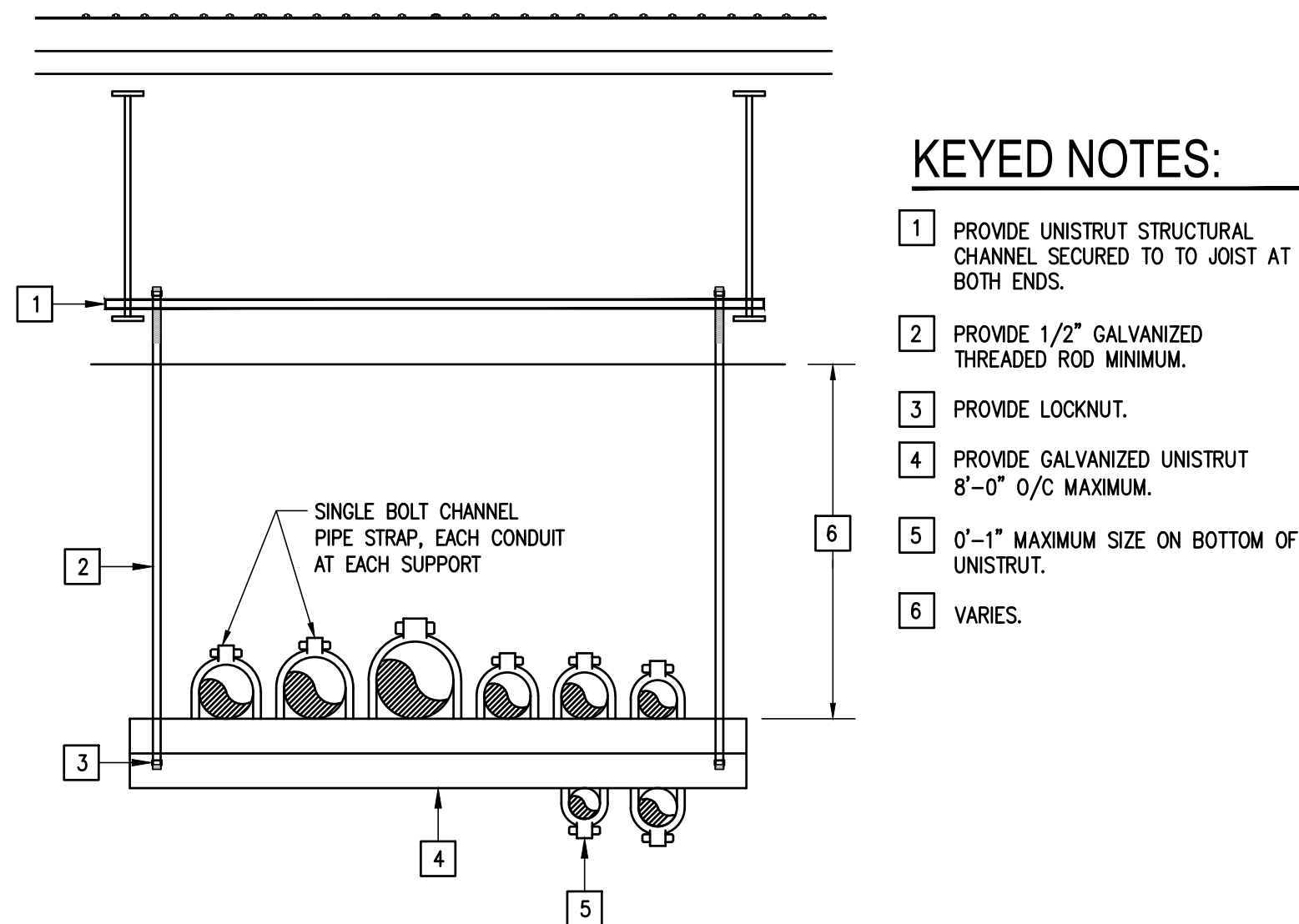
04 ROOF MOUNTED RACEWAYS
SUPPORT DETAIL
SCALE : NOT TO SCALE



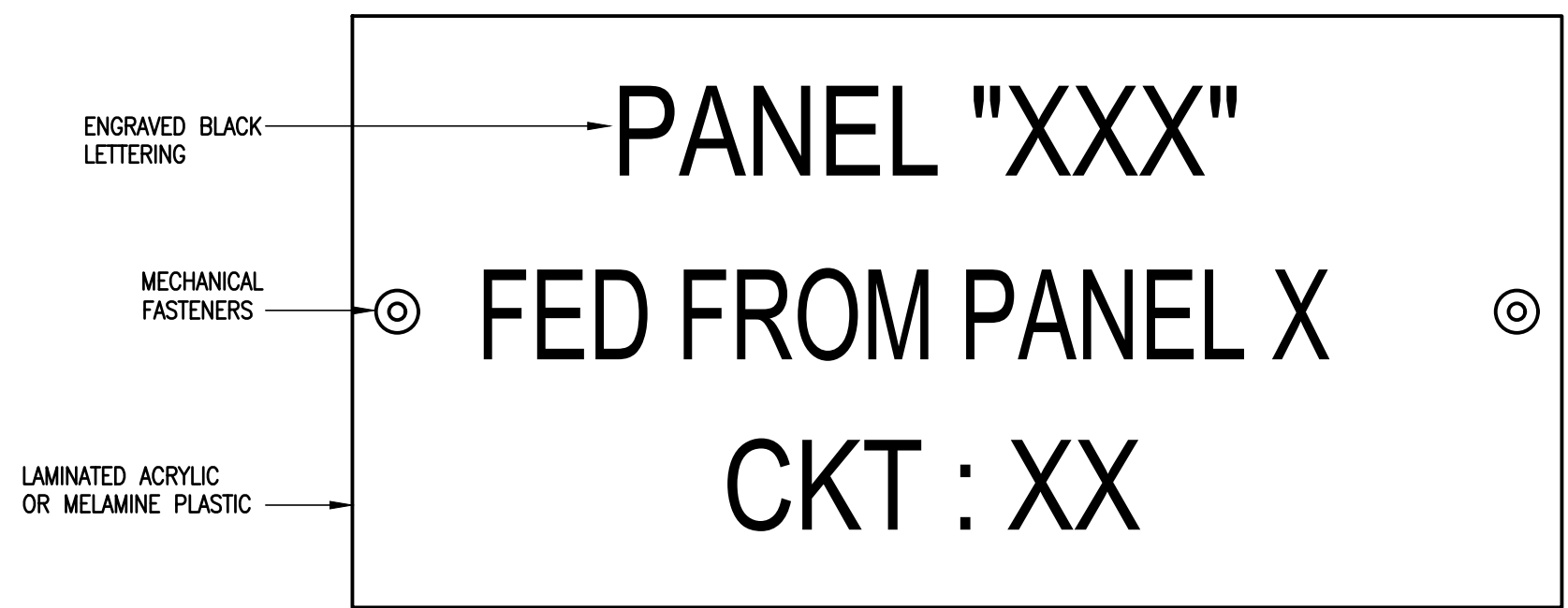
05 ROOF TOP UNIT (RTU)
CONNECTION DETAIL
SCALE : NOT TO SCALE



01 RACEWAY RUNS
SUPPORT DETAIL
SCALE : NOT TO SCALE



02 HORIZONTAL RACEWAYS
SUPPOR DETAIL
SCALE : NOT TO SCALE



NOTE: ATTACH NAMEPLATES TO ALL ELECTRICAL GEAR AS NOTED ON SECTION 260553.

EQUIPMENT
03 IDENTIFICATION LABEL DETAIL
SCALE : NOT TO SCALE

NO: REVISION: BY:

COPY NO:

CSP # 41-DMCP-0826



TEXAS

IDEA DONNA MECHANICAL UPGRADES

DONNA



DATE: SEPTEMBER 30, 2026

CHECKED BY: B. BURKE

DRAWN BY: J. R. / B.T.

PROJECT NO.: 26v21

CAD FILE:
SHEET:

ME5.02